

CATALOGUE 12 rev.1



Valid from 1st March 2025

"Simplicity, imagination and technology daily guide us to develop and provide the best solutions for signaling, command and access control"

All this, with the courtesy and design of the best Italy





ABOUT US

In 2009, **AB Tecno** developed the first product, Poly alzacatena, taking careful care of its design and functionality. In the same year it makes agreements with the best European manufacturers of accessories, chosen for their specialization in a specific branch of the industry: Jcm-tech for radio products, XPR for control systems Access and Witt Sensoric for infrared technology, and became their importer for Italy.

In 2015, AB Tecno registered the Abexo brand, which groups under its wing the products already developed internally over the years (Poly, Volt, Alf6, the Micro series, the Traffic lights series, ...), becoming thus for all intents and purposes a manufacturer of automation accessories. The collaboration between an Italian, a Spaniard, a German and a Belgian sounds like the opening of a joke; in actually puts into practice a fundamental principle: union is strength.

Today this business collaboration has evolved and become a true integration between companies, an element that allows them to work jointly to develop new solutions.

The resulting product catalog is the result of many years of experience, intensive work and mutual esteem among partners, and is intended to be recognized as the most comprehensive, specialized and innovative in the field of automation, security and access control accessories

The shared goal of the AB Tecno team is to create reliable, quality products that keep pace with other Europeans with whom we collaborate.



MISSION

"Simplicity, imagination and technology daily guide us to develop and provide the best solutions for signaling, command and access control".

www.abtecno.com

We are ACMI members Association of closing systems and mechanisms (Italy)

AB tecno is part of a network established that represents a relevant opportunity for growth and professional training for our company > www.assoacmi.it



OUR VALUES

Abexo and **Beematic** logos, which are registered trademarks owned by AB Tecno srl, are strongly characterized by the presence of bees.

Why so?

Because our corporate culture feels closely related to them. Exactly as our corporation, bees' organization is highly based on their collaboration and long-term vision: they have a high prospective and are work oriented to the future, not just for the single's or the colony's benefit. Bees' behaviour guarantees a beneficial effect on their species and it also positively impacts the outside context, making the difference on the well-being of the planet Earth.



We believe in a sustainable business model, which is able to satisfy the needs of the present generation, without compromising the future generation ones. Exactly as the bees, we consider our corporation as a part of a much wider community and we promote a sustainable growth, both in time and space.





OUR ABEXO PRODUCTS WARRANTY



5-YEARS WARRANTY

on Radio lines products, Flashers, Signallers and LED traffic lights, Universal control units, Manual barrier MOVEO



2-YEARS WARRANTY

on Photocells lines products and Security Devices detectors, pedestrian and industrial sensors opening doors, Devices and Mechanical Accessories

All the prices are meant as net prices (excluding VAT taxes) and are under Ex Works Incoterms: the valid terms are available on www.abtecno.com. The actual price list replaces all the previous ones and cannot be changed without previous announcement.

Please do not hesitate to contact us for special inquiries or products that are not in this catalogue.

All the illustrations and informations inside the catalogue are not binding.



PRODUCT LINES

Radio products

- > Universal 4 channels transmitters: EGO-PLUS, EGO64
- > Universal 6 channels transmitters: EGO KUBE
- > 4 channels transmitters 433,92MHz: EGO433
- > Universal multi-frequency radio keypad: EGO-KODE
- > Universal radio Antennas: SMALL, DUAL, PLANE, PIPE, BASIC433, BASIC868
- > Universal self-learning radio receivers: COPY-MULTI, COPY-433

from page A7

Industrial and Special Radio Products

- > Industrial radio transmitters and receivers: INDUS, INDUS-RX
- > Long range radio link: MARCONI 2.0

from page A19



Tastiere Standaalone

- > Vandal-Resistant Standalone Keypad
- > Proximity reader keypads from page A25









Flashing lights, led traffic lights

- > Led flashing lights: MICRO-FLASH, BLINK, MEGA BLINK, VOLT, ALF6, ALF-LUX
- > LED flasher battery-operated and with motion sensor: POWERLED
- > Universal spare board: RETROFIT, RETROFIT SLIM
- > Universal high luminous efficacy spare board: MEGA RETROFIT
- > Linear LED wall indicator: COBLED
- > LED illuminators for gate area: NEONFLEX10, FLAT WHITE 12/24V
- > Traffic light: TRAFFIC, MICRO-TRAFFIC, TRAFFIC COB
- > Led signalling light: MICRO-RGB
- > Central management unit for 2-way traffic light systems: TRAFFIC CONTROL, PARK from page A31

Photocells and safety device

- > Laser detector for industrial gates and doors: FLATSCAN IP66
- > Security sensor for industrial doors: LZR
- > Laser technology sensor for industrial gates and doors: L36
- > Sensitive safety edges: ACTIVE, ACTIVE-R3 and CAPTIVE
- > Photocells: MICRO-P27S, REFLEX, INFRA 16, SW50, P41, P37B
- > Infrared protective barriers: LIGI01, LIGI07
- > Compact synchronised photocells: ARGOS
- > Photoelectric immaterial barriers for sectional and high-speed doors: AO
- > Optics for sensor profile: WS-SIGNAL 15, LOW POWER SIGNAL
- > Spiral cable: SPK
- > Crushing force gauge for gates and motorized doors: CERTIFIKO from page A49









Metal mass detectors / Barrier sensors

- > Activation and presence detector: EVOLOOP
- > Security laser barrier detector: LZR-H100
- > Metal mass detectors, MAGNETIX: DETEC, MATRIX, BASIC from page A79

Detectors and Sensors for industrial doors

- > Industrial door sensors (opening)
- > Industrial door sensors (opening and safety) from page A87



Detectors and Sensors for pedestrian doors

- > Radar sensors for pedestrian doors: ORASCAN, FLATSCAN
- > Sensors for automatic doors: SSR-3, HR100-CT, 3H-IR14C e HR50-UNI
- > Infrared safety beam sensor for sliding doors: HP1 from page A95



Door opening buttons non-contact, touch and mechanical

- > Non-contact buttons
- > Mechanical buttons: PUSH PLATES from page A101



Universal control units

- > Control unit and accessories for shutters: SH230
- > Central unit with remote control-controlled electric brake: SH230POWER
- > Control unit for motorized rolling shutters with integrated courtesy light: SH230LUX
- > Control unit compatible with 230V elettromechanical and hydraulic engines: 051D
- > Central control unit for sliding gates: K82
- > Three-phase 230Vac control unit with inverter: TWISTER
- > Three-phase control unit with display: T400 from page A107



Manual Barrier and containers

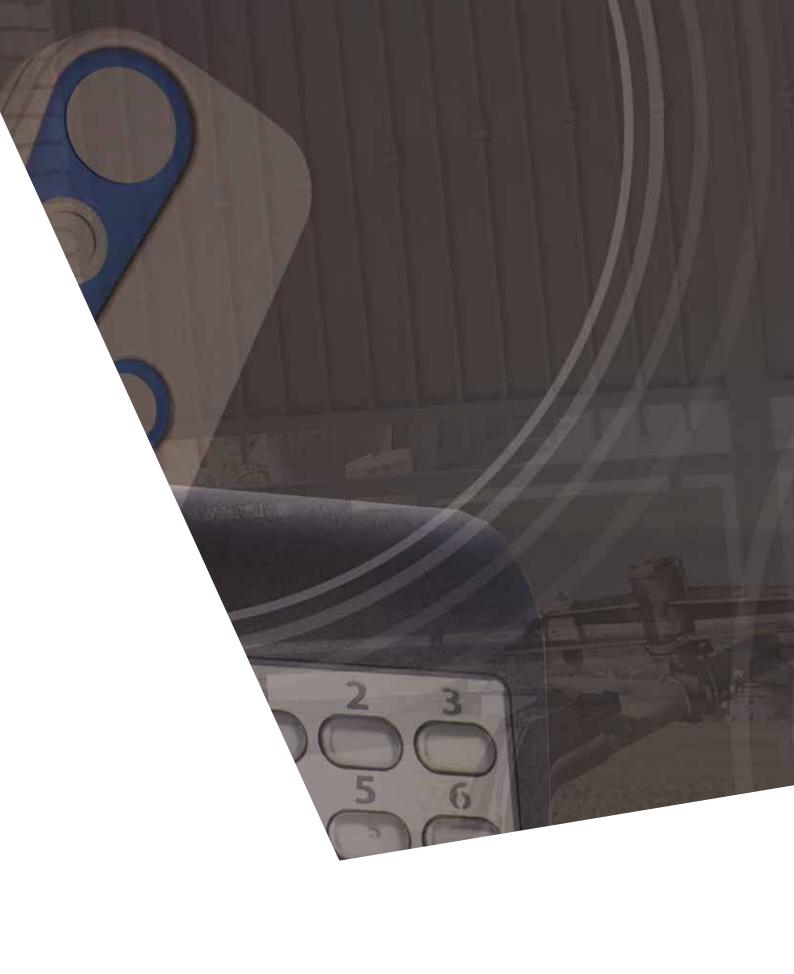
- > Manual barrier: MOVEO
- > Passage restriction columns and accessories: POLY
- > Cases for electronic control units: BOXX
- > Plastic box for control units: PBOX

from page A119

Devices and mechanical accessories

- > Universal aluminum columns: DORICA
- > Rack and fixing elements: CRP and CRM
- > Protection module: UNI-SAVE
- > "Parachute" brakes for sloping sliding gates: CONTROLGIR
- > Security Box, Roller shutter locks, Key-switch, Batteries
- > Power magnets
- > Electric lock and Fall prevention cable
- > Power supply from page A127





Radio products



4-channel multi-frequency transmitter EGO PLUS / A10
6-channel multi-frequency transmitter EGO KUBE / A11
multi-frequency transmitter EGO 64 / A12
transmitter 433,92MHz EGO433 / A13
Multi-frequency keypad EGO-KODE / A14
Radio ANTENNAS / A15
"Universal" multi-frequency receivers COPY-MULTI and COPY-433 / A16





"The Perfect Control!"

All the radio controls you could wish in the widest range on the market.



We offer a wide range of radio remote controls for all your requirements, including industrial use



Unify the existing transmitters THE ALTER-EGO OF YOUR TRANSMITTERS

because is an emulator of an original brand transmitter



Duplicating the original transmitters has never been so easy! A shell of new design, linear, light and intuitive contains a jewel of technology.

The **EGO transmitter** is suitable to unify or replace all outproduction radio commands plus the ability to replace almost all the models currently trading.

EGO is able to emulate a large part of the transmitters. The frequency spectrum reproduced in self-learning range from 433 MHz to 868 MHz (excluding quarzate frequencies ranging from 28.785 MHz to 40.600 MHz).

In addition to the frequency, **EGO** is able to recognize the encoding type present in the original transmitter (if fixed code or rolling code) and replicate it precisely and constantly.

You can store up to 4 transmitters with different frequencies and codes (one for each button).

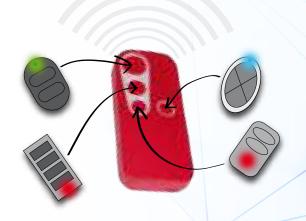


Originals, a guarantee of operation.

Why prefer an ORIGINAL transmitter for your automation?

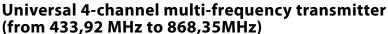
When a transmitter is developed, large investments are made in order to offer the best in all product aspects: design, type of code (to secure your automation), radio design (to ensure conformity to radio frequency standards and offer a range that corresponds to your needs). All this process, research, testing and certification has a cost, the cost of quality. For reasons related to your automation safety, quality

adaptability and for ethical reasons, it is certainly recommended to buy an original transmitter - which will always be better than the copy.



When do you need a compatible transmitter?

When the original model is not available any more (and therefore the user would be forced to buy a different model and consequently add a new radio receiver to the existing system, with additional installation costs) and when the user has to control several automations of differents brands or from differents time periods and therefore needs a universal transmitter that unifies all the originals transmitters in a single device.











The EGO's evolution leads to EGO PLUS. Compatibility increased in a single version.

Universal 4-key/channel multi-frequency transmitter (433.92MHz to 868.35MHz). Manufactured entirely in Italy, it is capable to learn fixed and rolling codes. Each key can be independently programmed so that 4 differents transmitters can be memorised in a single device.

It is also equipped with its own rolling-code that allows to securely manage residential automations. Simplified original copying: LEDs indicate how to complete the programming depending on the remote control model to be copied.

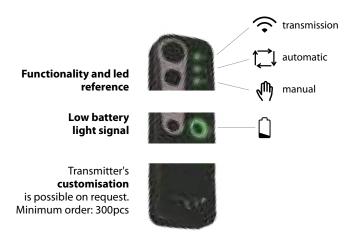
Uses a 3V CR-type battery.

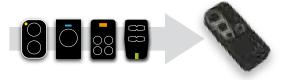
NEW (DOUBLE) ANTENNA

NEW SOFTWARE PLATFORM

Technical specifications

Power supply: n.1 battery CR2450 Frequency: from 433,92 Mhz to 868,35 Mhz Operating temperature: -20°C, +55°C



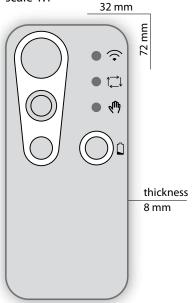


ORIGINAL COPYING SIMPLIFIED

News leds indicating how to complete the programming depending on the model's remote control to be copied



DIMENSIONS scale 1:1





A 10 www.abexo.tech

Universal 6-channel multi-frequency transmitter (from 433,92 MHz to 868,35MHz)









Universal 6-key/channel multi-frequency transmitter (433.92MHz to 868.35MHz).

The same functions, the same ease-to-use and the same EGO PLUS power of software inserted in a particularly resistant and translucent 6-buttons shell that allows LEDs to be displayed at the icons (simplified copying).



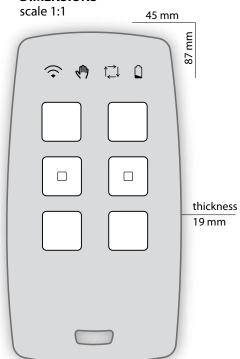
NEW (DOUBLE) ANTENNA

NEW SOFTWARE PLATFORM

Technical specifications

Power supply: n.1 battery Frequency: from 433,92 Mhz to 868,35 Mhz Operating temperature: -20°C, +55°C

DIMENSIONS





ORIGINAL COPYING SIMPLIFIED

News leds indicating how to complete the programming depending on the model's remote control to be copied





SIMPLE UNDERSTANDING AND IMMEDIATE

Corresponding to the LEDs are designed icons explaining their functions









Universal 4-channel multi-frequency transmitter (from 433,92 MHz to 868,35MHz)



EGO64=EGO+EGO32

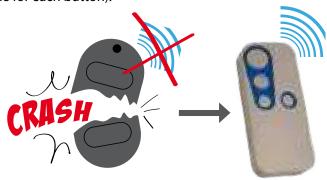
Duplicating the original transmitters has never been so easy! A shell of new design, linear, light and intuitive contains a jewel of technology.

The **EGO64 transmitter** is suitable to unify or replace all outproduction radio commands plus the ability to replace almost all the models currently trading.

EGO64 is able to emulate a large part of the transmitters. The frequency spectrum reproduced in self-learning range from 433 MHz to 868 MHz (excluding quarzate frequencies ranging from 28.785 MHz to 40.600 MHz).

In addition to the frequency, **EGO64** is able to recognize the encoding type present in the original transmitter (if fixed code or rolling code) and replicate it precisely and constantly.

You can store up to 4 transmitters with different frequencies and codes (one for each button).



CODE GENERATOR FEATURE

If the original transmitter is not available or damaged EGO64 is provided internally with the codes from the models described in the instructions.

HOW DOES IT WORK

After entering in the programming mode, press as many times as required in the key where you want to store the original code.

The table in the instructions

	Structions	
П	brand A	(N2)
П	brand B	N5
П	hrand C	N6

See example:

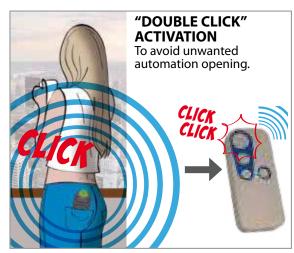
To add the code of "BRAND A" in the EGO64 transmitter, press N2 times the button that you want to store. For "BRAND B" instead, press it N5 times.















4-channel transmitter with 433,92MHz frequency (keyless emulator of fixed and rolling codes – HCS standard)





EGO433



Self-learning 433,92 Mhz 4-channel transmitter. Produced entirely in Italy, **EGO433** can duplicate fixed code and keyless HCS transmitters. Each channel can replicate a different transmitter and given a compatible receiver EGO433 is able to replace even a broken one thanks to its code-generator feature. Powered by a 3 V CR2032 battery, EGO433 signals the user before the battery is empty changing the behavior of flashing led during common usage. Furthermore EGO433 prevents accidental battery drains by stopping the transmission after 20 seconds of continuous pressing.





CUSTOMIZATION OF EGO TRANSMITTERS

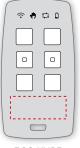


It's possible, on request, to customize the front part of the EGO transmitter with logos or writings.

Minimum quantity 300 pcs.











EGO PLUS customization area

On request, it is also possible to personalise the EGO PLUS/EGO KUBE transmitters shell colour:

Minimum quantity 1500pz

> Ask our customer service



Radio products/

Universal 4-channel multi-frequency keypad (from 433,92 MHz to 868,35MHz)



EGO-KODE

EGO-KODE is a multi-frequency universal radio keypad, compatible with any receiver you already have in your automation system. It allows you to open your gateway with a simple PIN code.

You will be able to get in easily and freely without a key. EGO-KODE is user-friendly, safe and accessible. It can be battery-powered or by using the two cables that were previously needed for your old key-switch.





TECHNICAL FEATURES

Learning capability: 4-channel radio output

Frequency: 433,92 - 868,35 MHz

Entry mode: PIN Code PIN code lenght: 1-8 digits

Power supply: 12-24 VAC/DC; max. 100 mA or

CR2 lithium battery included (3V)

Tamper: yes

Degree of protection: IP65

Operating temperature: -20°C to +50°C, without

condensation

Dimensions: 92x51x27 mm





Radio Antennas

ANTENNAS



The capacity of radio devices can be influenced by environmental conditions (radio interference) and doesn't exclusively depend on the quality of the transmitter and receiver, but is determined by the quality of the antenna and its installation. Abexo, in order to offer you the best solutions, offers a wide range of professional high quality antennas.

SN Gain Freque

APE - 515 / 2868

SMALL Antenna

€ 37,90

SMALL

Gain at 868/915 Mhz: 2,1 dBi Frequency: 860-960 MHz / 1710-2170 MHz

Applications: 868/915MHz

(LoRa, LoRaWAN, Sigfox, ISM), GSM-GPRS 900/1800MHz, 3G-UMTS 2100MHz.

4G-LTE / 5G (Banda 1, 2, 3, 8)

Dimensions: 100x80x30 mm Connector: SMA male Cable: RG174 3 m

Strenghts: appearance, stabilty



DUAL

Gain at 433 MHz: 2,1 dBi Gain at 868/915 MHz: 2,1 dBi Frequency: 420-510 MHz /

810-1000 MHz

Dimensions: 210x100x30 mm

Connection: cut cable

(SMA connector)

Cable: RG174 3 m

Strenghts: mechanical

resistance, dual-frequency

APE - 515 / 4368 DUAL Antenna

€ 37,90



Applications: 868/915MHz (LoRa, LoRaWAN, Sigfox, ISM), GSM-GPRS 900/1800MHz, 3G-UMTS 2100MHz,

WiFi 2,4GHz, 4G-LTE / 5G (Banda 1, 2, 3, 5, 7, 8, 20, 28)

Dimensions: 175x100x80 mm Connector: SMA male

Cable: Ø5mm low loss, 5 m

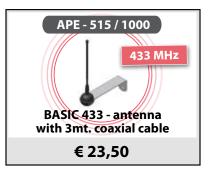
Strenghts: stability, broadband (it tends to keep the frequency even in the presence of metal masses)

APE - 515 / 2168

PLANE Antenna

€ 144,80







All the antennas comply with RoHS/2 directive





> scan the QR code / click on the link

Check the technical features of these antennas

https://bit.ly/39dgjEl



COPY-MULTI

NEW

The universal receiver **COPY-MULTI** allow extreme versatility in both new and existing installations.

Extreme flexibility: they allow storing remote controls from different distances, with fixed and rolling codes, inside a single receiver. Therefore, the universal receivers allow, in most cases, to unify installations or replace non-functioning receivers without replacing existing radio controls and thus ensuring better continuity service and less discomfort for users.



MULTI-FREQUENCY (FROM 433,92 MHz TO 868,35 MHz):

- > MAXIMUM VERSATILITY FOR NEW AND EXISTING **INSTALLATIONS**
- > ABLE TO STORE MANY ROLLING-CODE TRANSMITTERS AND EVERY FIXED-CODE TRANSMITTER
- > SIMPLIFIED MAINTENANCE: ALLOWS THE SUBSTITUTION OF NON-FUNCTIONING RECEIVERS WITHOUT REPLACING **EXISTING RADIO CONTROLS**
- > STORE RADIO CONTROLS FROM DIFFERENT BRANDS IN A SINGLE RECEIVER



TECHNICAL SPECIFICATIONS

2 channels (relays NO)

Power supply

- from 12 VAC to 24 VAC
- from 12 VDC to 24 VDC

Relay contacts

- n.2: 2A-120VAC / 2A-24 VDC

Frequency

from 433,92 to 868,35 MHz

Max storable codes

Fixed and Rolling (200)

Dimensions

77x42x18 mm

Operating temperature

-20°C, +60°C



> Scan the QR code and click on the link. and Click on

> COPY-MULTI

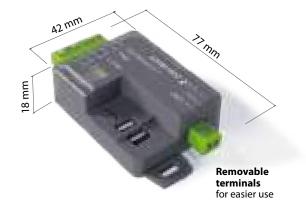
OPERATING LOGICS

Each channel of the receiver can be set in one of the three possible ways:

Impulsive: the relay remains active until the button of the transmitter is pressed.

Step-by-step: one push of the button energizes the relay, a second one de-energizes it.

Timer: when the button of the transmitter is pressed, the relay is energized and de-energized after a selectable time (up to a maximum of 120 minutes).







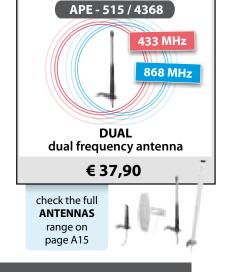




MAXIMUM **COMPATIBILITY** WITH RADIO **CONTROLS ON THE** MARKET









www.abexo.tech A 16

Universal self-learning receiver









The COPY-433 is a universal receiver with a 433 MHz frequency for gate automation. It is equipped with 2 NO channels and 2 relay contacts. It can memorise remote controls of different origins up to 200 codes with 12-24 bit HCS protocol without keys and fixed codes, thus allowing, in most cases, simplifying installations or quickly replacing non-functioning receivers without replacing existing radio controls.

FREQUENCY 433,92 MHz

- > THE SIMPLE AND LOW-PRICED UNIVERSAL **RECEIVER**
- > RECOGNISES HCS-STANDARD AND ALL **FIXED CODE TRANSMITTERS**



TECHNICAL SPECIFICATIONS

2 channels (relays NO)

Power supply

- from 12 VAC to 24 VAC
- from 12 VDC to 24 VDC

Relay contacts

- n.2: 2A-120VAC / 2A-24 VDC

Frequency

433,92 MHz

Max storable codes

HCS 12-24 bit without key and Fixed (200)

Dimensions

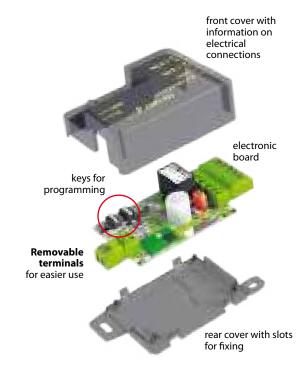
77x42x18 mm

Operating temperature

-20°C, +60°C



> Scan the QR code and click on the link. Visit our website



OPERATING LOGICS COPY RECEIVERS

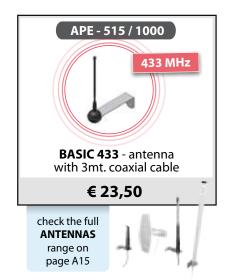
Each channel of the receiver can be set in one of the three possible

Impulsive: the relay remains active until the button of the transmitter is pressed.

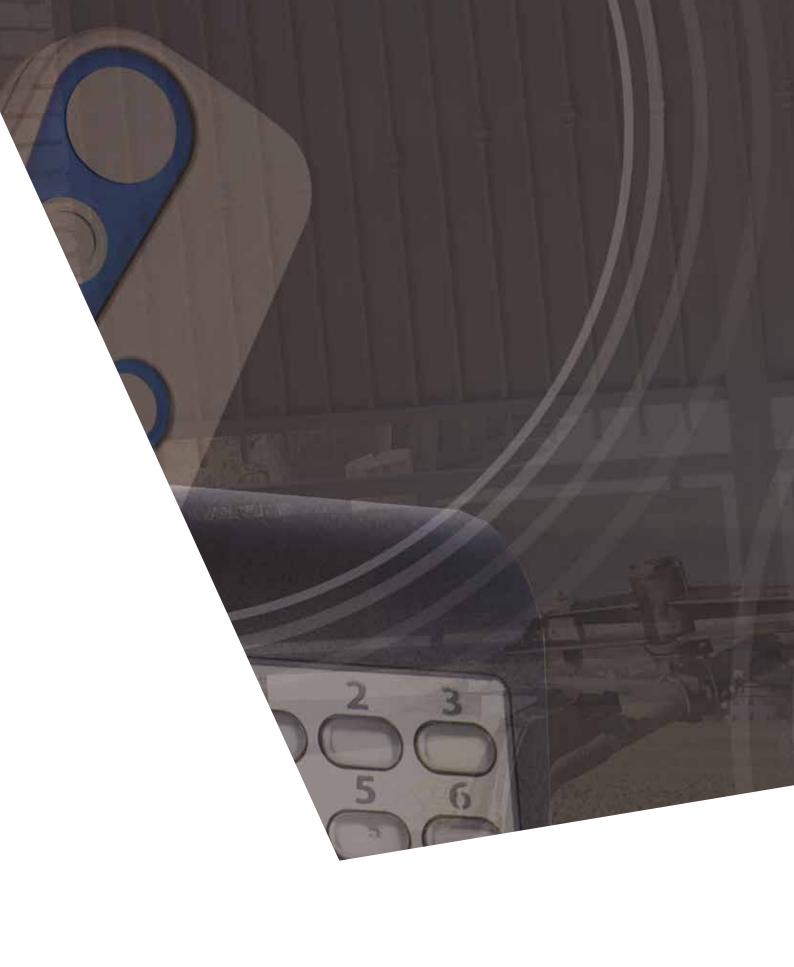
Step-by-step: one push of the button energizes the relay, a second one de-energizes it.

Timer: when the button of the transmitter is pressed, the relay is energized and de-energized after a selectable time (up to a maximum of 120 minutes).









Industrial and Special Radio Products



Industrial radio transmitters and receivers INDUS / A20
Long range radio link MARCONI 2.0 / A22



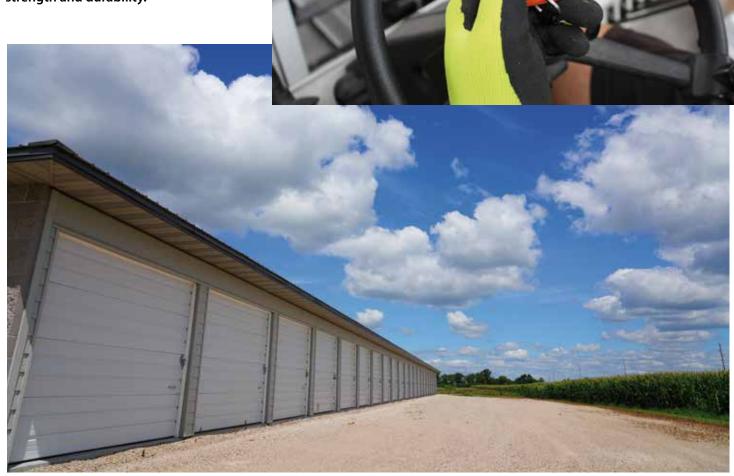
Radio products/ Industrial transmitters 4 and 6 Channels (433,92MHz)

bexo INDUS





The INDUS industrial remote control with 4 or 6 keys/channels, is the optimal solution to satisfy the complex control requirements in industrial environments, guaranteeing an effective remote management, with an intuitive and adaptable interface. INDUS is synonymous with adaptability and robustness, offering high performance in terms of mechanical strength and durability.



MAXIMUM RESISTANCE

Manufactured from highly mechanically resistant materials, the INDUS remote control can withstand crashes and falls



ERGONOMICS DESIGNED FOR INDUSTRIAL USE

The ergonomics of INDUS and the size of the buttons, guarantees safe and comfortable use, even in the most difficult conditions

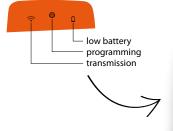


Industrial transmitters 4 and 6 Channels (433,92MHz)





The icons, next to the leds, explain their functions







EXCELLENT RADIO RANGE

Large internal antenna

dimension

TIRELESS BATTERY, TRIPLE POWER. The CR2450 battery guarantees three times as many activations compared to a classic CR2032 battery



DIMENSIONS



THE EYE ALSO WANTS ITS SHARE...

The design and colours are designed to be consistent with the industrial environment. For large quantities there is the possibility of graphic customisation







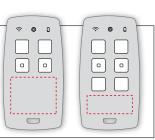
CUSTOMIZATION OF INDUS TRANSMITTERS

It's possible, on request, to customize the front part of the INDUS transmitter with logos or writings: minimum quantity 100 pcs.

On request, it is also possible to personalise the transmitters shell colour: $\underline{\text{minimum quantity } 1.000pz}$

> Ask our customer service

INDUS4 / INDUS6 customization area





INDUS RX

The INDUS RX receiver, small and discreet, is designed to be inserted into electrical panels.

Technical characteristics

Power supply: 12-36Vac / dc Frequency: 433,92 MHz Remote controls storable: 500 max Output relays: n.2 signal relays max 1A Dimensions: 77x42x18 mm Operating temperature -20°C, +55°C



Removable clamps for easy handling









Long range radio link, low power consumption



MARCONI 2.0





Guglielmo Marconi was an Italian inventor and electrical engineer known for his pioneering work on long-distance radio transmission and for his development of Marconi's law and a radio telegraph system. He is usually credited as the inventor of radio, and he shared the 1909 Nobel Prize in recognition of his contributions to development of wireless telegraphy.



LINK-T2 **TRANSMITTER** (encoder 2 CH)



up to 5 Km bidirectional transmission

LINK-R2 **RECEIVER** (decoder 2 CH)



Particularly recommended for: irrigation systems, gates, alarms, lights





up to 1 Km bidirectional transmission



REMOTE CONTROL **T6**

Long range radio link, low power consumption



The half-duplex radio link **MARCONI** is used for the remote control of gates, lights, alarms, irrigation systems, etc. It guarantees very long communications distance, high sensitivity, reduced energy consumption and high immunity to interference. It works thanks to the combination of LINK-T2 and LINK-R2.

LINK-T2 is a transmitter with encrypted communication capable of driving the LINK R2 receiver. This system allows to activate remote loads and it is **perfect for long distance applications of activation and control**, for example irrigation and alarm systems.

Cyclic reception also allows to get a consumption lower than 1mA, enabling also the usage in applications with battery supply.

BI-DIRECTIONAL

This bi-directional communication makes it possible for the transmitter to know the status of the activated output. The transmitter LINK-T2 (fixed, to be powered) allows up to 5 Km of bi-directional transmission whilst T6 (portable) up to 1 Km.



The LoRa technology allows long range transmissions thanks to its point-to-point wireless communications system

TECHNICAL DATA

Voltage: 10÷33 Vdc / 9÷24 Vac

Average consumption at rest with all the contacts open:

decoder = 9,5 mA

Maximum consumption (Tx RF) with all the contacts open:

 $encoder = 22 \div 30 \text{ mA} / decoder = 55 \text{ mA}$

Max relay contacts power: 5A@24VDC / 0,25A@240VAC

Frequency: 868,525 MHz

RF power: $decoder = 19 \div 22 dBm / encoder = 19 \div 22 dBm$

Modulation: LORA™

Operating temperature: -20°C, +70°C **Dimensions: 77 mm x 42 mm x 18 mm**

Receiver's memory: up to 100 encoders (transmitters)
Configuration of the outputs: Impulsive, bi-stable, timer







Products compliant with CE limits, certificates





Standalone keypads

Vandal-Resistant Standalone Keypad / A26
Proximity reader keypads / A28





EX6M-62A

The **EX6M-62A** and **EX6M-102A** keypads are stand-alone access control devices, recognized for their robustness and reliability. Designed to withstand adverse weather conditions, the EX6 series keypads are housed in a stainless steel enclosure, and their metallic keys are backlit with an elegant blue light. The choice between the two models mainly depends on the desired installation type: wall-mounted for the 62A model and flush-mounted for the 102A model, thus adapting to different architectural requirements.

To further improve device security, the RS-485 serial output can also be used to add up to 8 remote relays (RU1, RU2, or RB0408).





Vandal-resistant







APE-568/EX6M-62A

Stainless inox keypad for surface mounting with metal keys

€ 225,00

TECHNICAL SPECIFICATIONS

- 1000 user codes
- Power supply: 12/24 V DC/AC
- Output: 2 relays (R1: 10A/24 VDC/120 VAC; R2: 2A/24 VDC/120 VAC); up to 10 relays when used with RB0408 board
- Power consumption: 10 mA in standby and 60 mA in operation
- Indoor and outdoor installation
- Tamper protection against tampering
- Backlit stainless steel or polycarbonate (PVC) buttons
- Programmable buzzer
- 3 colored LEDs: 1 for operation and 2 configurable
- RS-485 connection
- Protection rating: IP65
- Dimensions: $113 \times 91 \times 42 \text{ mm}$

Optional decoders (for RS-485 BUS connection)

RU1

Decoding for 1 door with 1 relay

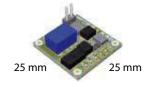
- RS-485 connection
- 1 relay output 2A
- 9/14Vdc power supply
- Acoustic signal
- Compatible with keypads MTPadPBK-EH-SA, EX6PM-103A, EX6M-62A, EX6M-102A



APE-568/RU1

Decoding for 1 door with 1 relay

€ 53,00



RU₂

Remote relay board for 2 doors

- RS-485 connection
- 2 relays output 2A
- 9/14 Vdc power supply
- Acoustic signal
- Compatible with stand-alone keypads MTPadPBK-EH-SA, EX6PM-103A, EX6M-62A, EX6M-102A



DIN RAIL BOX (2 modules)

APE-568/RU2

Decoding for 2 doors with 2 relays

€ 95,00

EX6M-102A



TECHNICAL SPECIFICATIONS

- 1000 user codes
- 12/24 V DC/AC power supply
- Output: 2 relays (R1: 10A/24 VDC/ 120 VAC; R2: 2A/24 VDC/ 120 VAC); 10 relays when used with RB0408 card
- Power consumption: 10 mA in standby and 60 mA in operation
- Indoor and outdoor installation
- Tamper protection against tampering
- Backlit stainless steel or polycarbonate (PVC) buttons
- Programmable buzzer
- 3 coloured LEDs: 1 for operation and 2 configurable
- RS-485 connection
- Protection rating: IP65
- Dimensions 140x105x39 mm

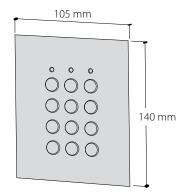




APE-568/EX6M-102A

Flush-mounted keypad with stainless steel front panel and metallic buttons

€ 225,00



Installation example



www.abexo.tech A 27

Abex MTPadPBK-EH-SA

The MTPADPBK-EH-SA keypad includes a 125Khz proximity reader, allowing it to read EM and HID standard TAGS and CARDS.

In the new version, the number of storable codes has increased from 99 to 1000. All codes can be modified in their respective 1000 memory allocations.

The device is equipped with an output relay.

To further increase device security, the RS-485 serial output can also be used to add 1 RU1, 2 RU2, or up to 8 relays (RB0408) within the area to be protected.





Vandal-resistant



Outdoor



Standalone



Proximity EM + HID 125 kHz



RS-485 connection

Accessories

TECHNICAL SPECIFICATIONS

- 1000 user codes
- Protection rating: IP65
- Proximity reader EM 4002/4100 and HID (125 kHz)
- Power supply: 12/24 VAC, VDC
- 1 relay output 2A/24 VDC/120 VAC; up to 9 relay outputs when used with RB0408 board
- Power consumption: 30 mA in standby and 100 mA in operation
- Material: black ABS
- Indoor and outdoor mounting
- Tamper protection
- Backlit metal buttons
- Acoustic buzzer
- 3 coloured LEDs for signalling/programming
- Dimensions 92x51x27 mm



€ 164,00

Stainless steel cover for outdoor use

€ 72,00

APE-568/MT-SPACER

ABS spacer for keypad surface mounting
€ 7,00



KEYRING TAGS



APE-568/PBX-1E

description:
keyring tag
numbered in ABS



code:
APE-568/PBX-1E-50
package:
n°50 tags



code:
APE-568/PBX-1E-100

package:
n°100 tags



code:
APE-568/PBX-1E-250
package:
n°250 tags

For prices, please contact customer service

A 28 www.abexo.tech

EX6PM-103A



TECHNICAL SPECIFICATIONS

- 1000 codes utilisateurs
- Indice de protection IP65
- Lecteur de proximité EM 4002/4100 et HID (125 kHz)
- Alimentation 12/24 Vac, Vdc
- Sortie: à 2 relais (R1 : 10A/24 VDC/120 VAC; R2: 2A/24 VDC/120 VAC); jusqu'à 10 relais si utilisé avec carte RB0408
- Consommation: 10 mA en veille et 60 mA en activité
- Montage à encastrement pour une installation à l'intérieur ou à l'extérieur
- Protection anti-sabotage
- Touches métalliques en inox rétroéclairées
- Buzzer sonore programmable
- n.3 LED colorées: 1 de fonctionnement et 2 pilotables
- Connexion: RS-485
- Indice de protection IP65
- Dimensions: 140x105x39 mm







Optional decoders (for RS-485 BUS connection)

RU1

Decoder for 1 door with 1 relay



RU₂ **Decoder for 2 doors** with 2 relays



see page A26



CARDS



APE-568/PBX-2

description:

Numbered proximity card ISO standard (0,75 mm) For prices, please contact customer service

APE-568/PBX-2-50 package: n°50 cards



APE-568/PBX-2-100 package: n°100 cards



APE-568/PBX-2-250

package: n°250 cards

www.abexo.tech A 29



Flashing lights, led traffic lights



Wall-mounted led flashing light MICRO-FLASH / A32
LED flasher battery-operated and with motion sensor POWERLED / A33
Universal spare board RETROFIT / A34
Universal high luminous efficacy spare board MEGA RETROFIT / A35
Universal, LED multi-tension flashing light BLINK, MEGA BLINK / A36
Universal, LED multi-tension flashing light VOLT / A37
Universal, LED multi-tension wall-mounted flashing light ALF6 and ALFLUX / A38
Linear LED wall indicator COB LED, NEONFLEX10, WHITE1224 / A40
LED 12/24v traffic light TRAFFIC / A42
LED strip traffic light TRAFFIC / A44
LED strip traffic light MICRO-TRAFFIC / A46
Traffic light system management control units TRAFFIC CONTROL, PARK / A47





MICTO-FLASH





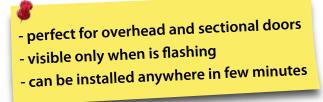
MICRO-FLASH is the innovative led flashing light designed to make the automation of garage doors more beautiful and high tech looking

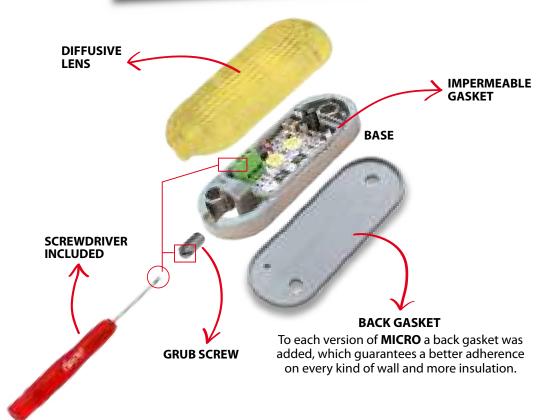




MICRO-FLASH GREEN

€ 33,50





TECHNICAL DATA

MICRO-FLASH allows choosing, through a jumper, 2 flashing types: steady light, flashing light.

Power supply	MAX absorption (mA)	Brightness (lm)		
24Vac +20% / -10%	62	45		
24Vdc +/-20%	55	45		
12Vdc +10% / -5%	70	40		

Operating temperature: -20°C, +60°C

In the early years of spread of automatic gates the cost to have them was very high. The automation was economically for the few and the flashing light, installed in evidence, in addition to its role of signaller, was used as a status symbol: large and very showy. Today the gate automation is affordable for many and the role of the flashing light has changed.

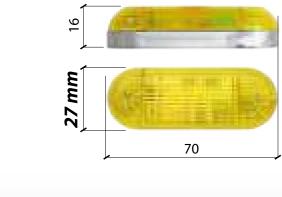
MICRO-FLASH is a small flashing light perfectly integrable in the system because of its size, but at the same time gives the maximum visibility during movement to signal the danger.

A nice gate need a nice flashing light. Well visible... but ONLY when it's NECESSARY.



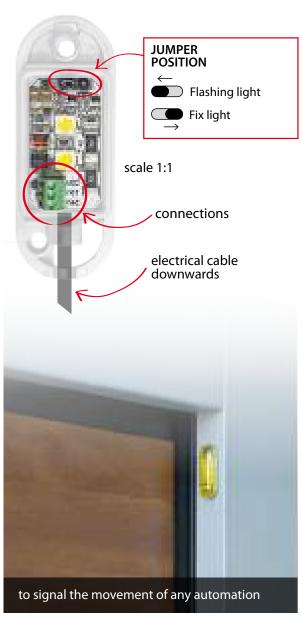
Wall-mounted led flashing light

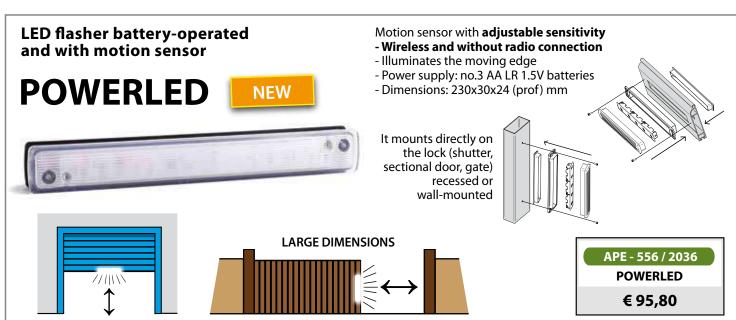














RETROFIT

The Best Seller









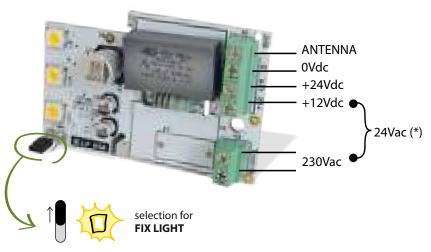


LESS THAN



ECO-technology

Replace the bulbs with the VOLT led board, SAVE energy and frequent replacements



JUMPER JP1



selection for **FLASHING LIGHT**

ECO-technology

Energy saving

The energy saving compared with traditional incandescent flashers is about 93%.

Duration/Resistance

The average duration of a Led lamp is estimated at 50,000 hours compared to 1,000 hours of an incandescent one.

The Leds are much more resistant to shock, vibration and voltage surges compared to traditional lamps. The Leds do not suffer of continuous switching on and off. So they are ideal for the flasher.

Luminous efficacy

The luminous efficacy of a light source is the ratio between the luminous flux and the input power and is expressed in lumens/watt. The used LEDs have a luminous efficacy of 110 lm/W, compared to 13 lm/W incandescent lamps.

TECHNICAL DATA

Voltage: 230Vac Current: 80mA Luminous flux: 80lm Voltage: 24Vac Current: 80mA Luminous flux: 80lm Voltage: 24Vdc Current: 80mA Luminous flux: 80lm Voltage: 12Vdc Current: 40mA Luminous flux: 30lm Operating temperature:



"UNIVERSAL" **FIXING BASE**

APE - 550 / 1012

VOLT RETROFIT card LED 12/24/230V

€ 30,90

(*) see instructions for 24 Vac connection

EXAMPLES OF COMPATIBILITY WITH MORE POPULAR BRANDS:



-20°C, +60°C

BFT model: - RAY LAMP NET



CAME model: KIARO

DITEC model: LAMP



FAAC model: LIGHT



FADINI model: - MIRI LAPI



NICE model: LUCY

PRASTEL model: FEBO

And many others...

Universal high luminous efficacy spare board

MEGARETROFIT



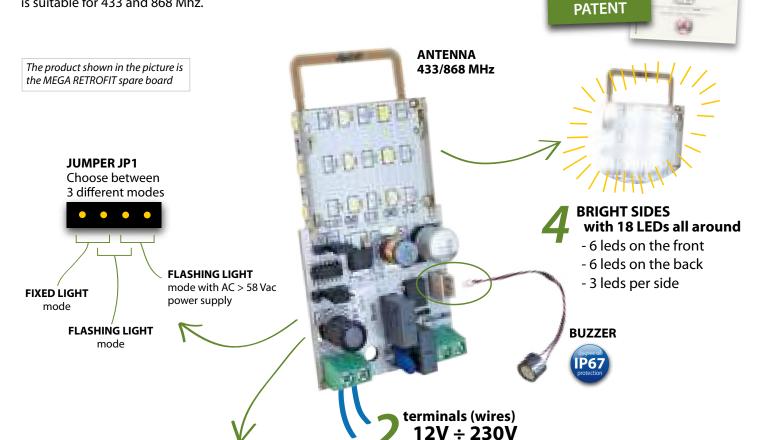
EUROPEAN



Thanks to our long-term experience with the Retrofit spare board and to our constant research of electronical components we designed a universal failsafe board. The wiring is made by 2 terminals from 12V to 230V ac and cc: thanks to the jumpers you can select the current and the flashing mode.

MEGARETROFIT has 18 LEDs, spread all over the 4 sides to offer a MEGA visibility! The optional buzzer can be placed outside the flashing lamp and the antenna

is suitable for 433 and 868 Mhz.

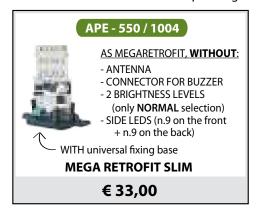


JUMPER JP2

Choose between 2 brightness levels

	NORMAL selection			HIGH selection			
Supply voltage	MAX absorption (mA)	Consump. (w)	Brightness (lm)	MAX absorption (mA)	Consump. (w)	Brightness (lm)	
12 Vdc ÷ 48 Vdc	125mA@12Vdc	1,6	110	210mA@12Vdc	2,5	170	
12 vac + 40 vac	33mA@48Vdc	1,6	110	60mA@48Vdc	2,9	170	
12 Vac ÷ 230 Vac	80mA@12Vac	1	110	141mA@12Vac	1,7	170	
12 Vac ÷ 230 Vac	23mA@230Vac	5,3	110	36mA@230Vac	8,3	170	

Operating temperature: -20°C, +50°C







Universal led flashing light, multi-voltage

BLINK











Voltage: 230Vac Current: 80mA Luminous flux: ~80lm

Voltage: 24Vac Current: 80mA Luminous flux: ~80lm

Voltage: 24Vdc Current: 80mA Luminous flux: ~80lm

Voltage: 12Vdc Current: 40mA Luminous flux: ~30lm

Operating temperature:

-20°C, +60°C

APE - 550 / 1410

BLINK with yellow lens and terminal antenna

€ 42,30

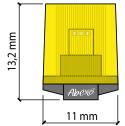
APE - 550 / 1420

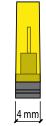
BLINKW with white lens and terminal antenna

€ 44,60

CAN BE CUSTOMIZED WALL **MOUNTING BRACKET** (included in the package)







MEGABLINK

Universal led flashing light, multi-voltage

high luminous efficacy

BEEP

BEEP

BEEP



MEGA VISIBILITY THANKS TO THE **MEGA RETROFIT BOARD**



BRIGHT SIDES with 18 LEDs all around

433/868MHz

INTEGRATED ANTENNA

Choose between 2 light modes STEADY LIGHT JUMPER JP1

FLASHING LIGHT

Choose between 2 brightness levels

NORMAL selection

HIGH selection

Operating temperature: -20°C, +60°C

	NORMAL selection			HIGH selection		
Supply voltage	MAX absorp. (mA)	Consump. (w)	Bright. (lm)	MAX absorp. (mA)	Consump. (w)	Bright. (lm)
12 Vdc ÷ 48 Vdc	125mA@12Vdc	1,6	110	210mA@12Vdc	2,5	170
12 vuc + 48 vuc	33mA@48Vdc	1,6	110	60mA@48Vdc	2,9	170
12 Vac ÷ 230 Vac	80mA@12Vac	1	110	141mA@12Vac	1,7	170
12 vac - 230 vac	23mA@230Vac	5,3	110	36mA@230Vac	8,3	170

IP67 BUZZER INTEGRATED

IN THE BRACKET

APE - 550 / 1430

MEGA BLINK with yellow lens without BUZZER

€ 53,60

APE - 550 / 1440

MEGA BLINK BUZZ with yellow lens and BUZZER

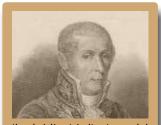
€ 73,50

Universal led flashing light, multi-voltage

MADE IN IT ALY

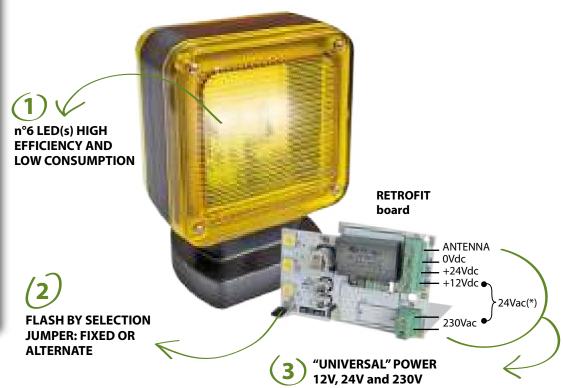


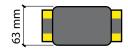
VOLT



Il volt è l'unità di misura del potenziale elettrico e della differenza di potenziale. Ha questo nome in onore di Alessandro Volta, che nel 1800 inventò la pila voltaica, la prima batteria elettrochimica. Nel 1880, l'International Electrical Congress (Congresso Elettrico Internazionale), ora International Electrotechnical Commission (IEC), approvò il volt (come unità di misura) per la forza elettromotrice. Il simbolo del volt è "v".

WIDE RANGE OF APPLICATIONS





92 mm

APE - 550 / 1010

12/24/230V VOLT flashing light with antenna terminal board 433/868MHz color: yellow/black

€ 42,20

S5 mm

APE - 550 / 1015



90° wall mounting bracket

€ 15,50



TECHNICAL DATA

Voltage: 230Vac (+/-10%) 50/60Hz

Current: 80mA (+/-20%) Luminous flux: ~80lm

Voltage: **24Vdc** (+/-20%) Current: 80mA (+/-20%) Luminous flux: ~80lm Voltage: **12Vdc** (+/-20%)

Voltage: **12Vdc** (+/-20%) Current: 40mA (+/-20%) Luminous flux: ~30lm

Operating temperature: -20°C, +50°C

ECO-technology

Power consumption: less than 2 watts.

The traditional flashers consume about 25W

Energy saving

The energy saving compared with traditional incandescent flashers is about 93%.

Duration/Resistance

The average duration of an Led lamp is estimated at 50,000 hours compared to 1,000 hours of an incandescent. The Leds are much more resistant to shock, vibration and voltage surges compared to traditional lamps. The Leds do not suffer of continuous switching on and off. So they are ideal for the flasher.

Luminous efficacy

The luminous efficacy of a light source is the ratio between the luminous flux and the input power and is expressed in lumens/watt. The used LEDs have a luminous efficacy of 110 lm/W, compared to 13 lm/W incandescent lamps.

(*) To connect 24Vac see instructions



Wall-mounted universal led flashing light, multi-voltage



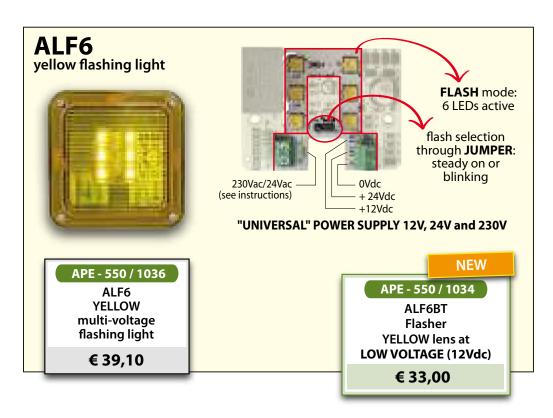
ALF6



The wall-mounted led flashing light ALF6 is easy to install and elegant. Its multi-voltage power (12/24/230V) makes it suitable for use with all control units, thanks to its flash selection jumper.

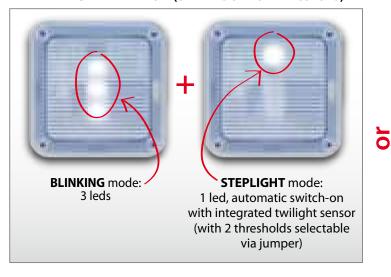
The ALF LUX version relies on the control unit to activate a night-time courtesy light (1 led) thanks to an integrated twilight sensor.

ALF LUX turns into a courtesy light when all the 4 high-efficiency leds are on.





ALF LUX ALF+LUX (3+1 LEDs with white lens)





APE - 550 / 1031 ALF LUX WHITE multi-voltage flashing light with twilight sensor

modes **€ 49,00**

and 3 operating





Operating temperature -20°C , $+60^{\circ}\text{C}$

OUR ATTENTION TO DETAILS MAKES THE DIFFERENCE

The screws used are made of stainless steel and specific for plastic. The LEDs used are high efficiency and reliability. A selected and guaranteed range of brightness and color light characterizes them.

T ECO Jack HOLOGY					100	
ECO-technology	ALF6/ALF6W	<i>I</i> line	AL	.F-LU	X line	00/
Power supply	current (6 led - luminous flux)	lumen	current (1 led - extra)	lumen	current (4 led)	lumen
230Vac +/-10% 50/60Hz	max 80mA	80lm	-	-	-	-
24Vdc +/-20%	max 80mA	80lm	max 35mA	30lm	max 90mA	85lm
24Vac +20%/-10%	max 80mA	80lm	-	-	-	-
24Vac +/-10%	-	-	max 150mA	30lm	max 280mA	85lm
12Vdc +10%/-5%	max 40mA	30lm	-	-	-	-



COBLED







The 24V COB LED linear signal lights with fixed yellow light offer a uniform and powerful lighting solution. Suitable for signalling obstacles or large doors and gates opening, where a traditional flashing light would be too small or insufficiently bright.

colour light

YELLOW





TECHNICAL DATA

Lamp type: COB LED * Light colour: yellow Power supply: 24Vdc Power: 10 W/m.

Degree of protection: IP55 Wiring: 2-wire cable side output **Profile**: dark grey aluminium Fixing: with 4 springs included



Dimensions: 17x9x1000 mm

COBLED 2000

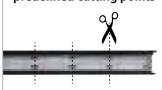
Dimensions: 17x9x2000 mm







COBLED can be shortened according to predefined cutting points







COBLED 1000 yellow light cob led indicator length 1000 mm

€ 54,00

POWER SUPPLIES 30W/100W see page A41

APE - 244 / 0320

COBLED 2000 yellow light cob led indicator length 2000 mm

€ 88,00

* COB LED advantages:

Uniform light: One of the main advantages is the production of a continuous, homogenous light without the individual light spots visible in conventional LED strip. This is particularly useful in applications where light is reflected or where uniform illumination of a surface is required.

High luminous intensity: Due to chip density, COB LEDs can produce a high quantity of light from a small surface area. The absence of individual lenses or casings for each LED chip improves light output.

Energy efficiency: They generally provide a good lumen/watt ratio, which means more light with less energy consumption.

Compact design: The integration of several chips in a single module allows for smaller and more compact luminaires.

Good heat dissipation: The design with a good thermal substrate helps manage the heat generated, improving adaptability and durability.

Wide emission angle: COB LEDs can often offer a wider emission angle, ideal for illuminating larger areas.

Less light loss: The absence of individual lenses or casings for each chip can reduce light loss.

NEONFLEX10

NEW

Silicone LED light diffuser with white light and aluminium profile

NEONFLEX10 is a white LED fixed light illuminator designed to signal obstacles or the opening doors and gates, increasing the safety of the area. The LED includes an aluminium profile for fixing.



TECHNICAL DATA

Power supply: 24 Vdc Power: 10 W/m Brightness: 486 lm Light temperature: 3000 K

Degree of protection: IP67 Dimensions: 30 x 13 x 1000 mm

30 x 13 x 1500 mm 30 x 13 x 2000 mm

Profile: Aluminium

Wiring: Cable length 100 cm

Operating temperature: -25°C, +60°C















APE - 244 / 8010



NEONFLEX10-100 white led strip with aluminium profile length 1000 mm

€ 75,00

APE - 244 / 8015



NEONFLEX10-150 white led strip with aluminium profile length 1500 mm

€ 108,00

APE - 244 / 8020

NEONFLEX10-200 white led strip with aluminium profile

length 2000 mm € 139,00

FLAT WHITE 12/24V

9 LED white light indicator with high brightness





TECHNICAL DATA

Power/Consumption/Lumens:

ower, consumption, Earners.				
Power supply	P max	Brightness		
12 Vac ÷ 27 Vac	3,5 W			
12 Vdc ÷ 39 Vdc	2 1 \//	54 lm		
230 Vac (12 Vdc *)	2,1 W			

98 mm 98

* (with TRAFFIC DRIVER cod. APE-550/3012)

Degree of protection: IP65

Operating Temperature: -20°C, +60°C Stainless steel screws / Metal structure



APE - 550 / 3006



FLAT WHITE 12/24V white led indicator "max light"

€ 52,00

APE - 550 / 3012



TRAFFIC DRIVER convertitore 230/12vdc

€ 20,10

The lifespan of our Leds is estimated to be equal to 50.000 hours of use (5.7 years), unlike incandescent bulbs whose lifespan is estimated at approximately 8.000 hours (less than one year).



TRAFFIC





ECO-technology





TRAFFIC is a multi-voltage (12/24 Vdc) led traffic light. An innovative and multifunctional product suitable for different types of applications such as:

- Civil and industrial closures
- Gates and barriers automation
- Access ramps
- Status display for alarm systems
- Status display for doors

With its **9 high-brightness leds** TRAFFIC is the solution for a number of needs. The lifespan of our implemented Leds is estimated to be equal to 50.000 hours of use (5.7 years), unlike incandescent bulbs whose lifespan is estimated at approximately 8.000 hours (less than one year).



TECHNICAL DATA 85 RED / YELLOW / GREEN 120 mm **Power Supply/Consumption/Brightness** for each individual TRAFFIC RED/YELLOW/GREEN Brightness Power supply P max 12 Vac ÷ 27 Vac 3,5 W 120 mm 85 12 Vdc ÷ 39 Vdc 54 lm 2,1 W 100 mm 230 Vac (12 Vdc *) 380 * (with TRAFFIC DRIVER cod. APE-550/3012) Degree of protection: IP65 255 **Operating Temperature** -20°C, +60°C Stainless steel screws **Metal structure** TRAFFIC1 RED / GREEN TRAFFIC2 TRAFFIC3

Led traffic lights 12/24v



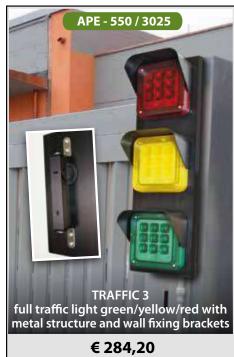






structure and wall fixing brackets € 100,80









signaller red "max light"

APE - 550 / 3003

€ 55,70



YELLOW TRAFFIC 12/24v traffic lights/led signaller yellow "max light"

€ 55,70

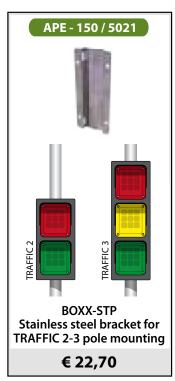
APE - 550 / 3009

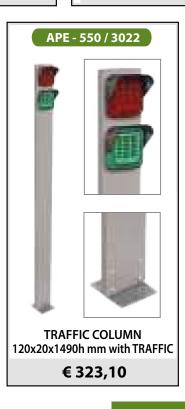
APE - 550 / 3004



GREEN TRAFFIC 12/24v traffic lights/led signaller green "max light"

€ 55,70









> see page A41 Control units for management systems traffic lights

TRAFFIC CONTROL and PARK

SPECIAL AND OEM VERSIONS ON REQUEST



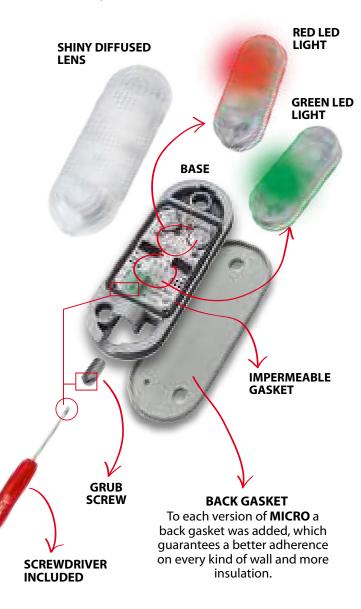


MICTO-TRAFFIC



MICRO-TRAFFIC is a led TRAFFIC LIGHT ideal for signaling the status of an alarm system or of a door in an access control system. Thanks to its compact size, it can be easily dissimulated and can be applied either on the wall or in the door jambs without affecting (ruin, dirty, etc.) the aesthetics of the access points.

The steel/glass colours of the materials used match both the traditional doors and door frames in aluminium (or other material).





APE - 550 / 1045
MICRO-TRAFFIC

€ 37,90





TECHNICAL DATA

MICRO-TRAFFIC presence of a three-pole terminal, one pole is shared, the other two are used for the independent connection of the green and red lights.

			_	_
	RED		GREE	N
Power supply	MAX absorption (mA)	Brightness (lm)	MAX absorption (mA)	Brightness (lm)
24Vac +20% / -10%	55	6	55	6,5
24Vdc +/-20%	35	6	35	6,5
12Vdc +10% / -5%	25	6	20	6,5

Operating temperature: -20°C, +60°C

TRAFFIC COB













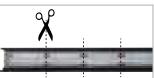
light colour **GREEN / RED**

Linear COB LED traffic light 24V green/red light

This innovative COB LED light is designed to be used as a traffic light, with an intense green or red light. Due to its Chip-on-Board technology, it provides uniform, high-efficiency

lighting. Its versatility makes it a visually impressive lighting solution.

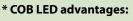
TRAFFIC COB can be shortened according to predefined cutting points





LED light intensity dimmable

17 mm



TECHNICAL DATA Lamp type: COB LED * Light colour: green/red Power supply: 24Vdc Power: 10 W/m.

TRAFFIC COB 1000

TRAFFIC COB 2000

Degree of protection: IP55 Wiring: 3-wire cable side output Profile: dark grey aluminium

Fixing: with 4 springs included

Dimensions: 17x9x1000 mm

Dimensions: 17x9x2000 mm

Uniform light: One of the main advantages is the production of a continuous, homogenous light without the individual light spots visible in conventional LED strip. This is particularly useful in applications where light is reflected or where uniform illumination of a surface is required.

High luminous intensity: Due to chip density, COB LEDs can produce a high quantity of light from a small surface area. The absence of individual lenses or casings for each LED chip improves light output.

Energy efficiency: They generally provide a good lumen/watt ratio, which means more light with less energy consumption.

Compact design: The integration of several chips in a single module allows for smaller and more compact luminaires.

Good heat dissipation: The design with a good thermal substrate helps manage the heat generated, improving adaptability and durability.

Wide emission angle: COB LEDs can often offer a wider emission angle, ideal for illuminating larger areas.

Less light loss: The absence of individual lenses or casings for each chip can reduce light loss.

APE - 244 / 0410

TRAFFIC COB 1000 cob led light green/red length 1000 mm

€ 60,00

APE - 244 / 0420

TRAFFIC COB 2000 cob led light green/red length 2000 mm

€ 100,00







Abexo MICTO-RGB





MICRO-RGB is the ideal led signalling light to show the status of an alarm system or a door in an access control system. Thanks to its compact dimensions, it perfectly fits any fixing area, walls or pillars, without affecting the elegance of the facade. The colours of the materials used to manufacture this light perfectly match both with traditional and modern or aluminium-made fixtures.

3 pin terminal with common and 2 poles for independent connection of light control. Colours can be selected through the position of DIP-SWITCH.



EXAMPLE OF SELECTION





TECHNICAL DATA

TECHNICAL DATA					
MAX Power supply absorption		Brightn	ess min÷max	(mcd)	
, , , , ,	(mA)	RED	GREEN	BLUE	
24Vac +20% / -10%	55				
24Vdc +/-20%	35	180 ÷ 350	450 ÷ 850	180 ÷ 350	
12Vdc +10% / -5%	25				

Table of DIP-SWITCH selection

			COLOR SELECTI	ON		
	Red and Green singles	IN Red double red IN Green double green	IN Red pilots the BLUE	IN Green pilots the BLUE	IN Red and IN Green pilot single BLUE	IN Red or IN Green double BLUE
DIP-SWITCH	IN Red 🔲 📙 IN Green	IN Red 🔲 🔲 IN Green	IN Red 🔲 🖶 IN Green	IN Red 🔲 📘 IN Green	IN Red 🔲 📘 IN Green	IN Red 🔲 📘 IN Green
	DL1 DL2	DL1 DL2	DL1 DL2	DL1 DL2	DL1 DL2	DL1 DL2
SW1-1		ON				
SW1- 2		ON				
SW1-3						ON
SW1-4						
SW2- 1	ON	ON		ON		
SW2- 2			ON		ON	ON
SW2- 3	ON	ON	ON			
SW2- 4				ON	ON	ON











GRUB SCREW













Operating temperature

-20°C, +60°C



Traffic light system management control units for driveways

TRAFFIC CONTROL







Central management unit for 2-way traffic light systems



The **TRAFFIC CONTROL** control unit enables the management of traffic light systems two-way, thus with up to two traffic lights with 2 or 3 lights (230V or 24V).

Use example:

Alternating one-way street Ramp of an underground garage Strait, underpass



Thanks to the LCD display, you can easily program the control unit according to one of 3 operating logics: time-based, reservation-based with control devices or mixed logic.

- Power supply: 24 Vac/Vdc
- Accessory power supply: 24 V max 0.5 A
- 3 control inputs: traffic light 1, traffic light 2, emergency
- Operating temperature: -20°C, +60°C
- Transformer included

APE - 511 / 2050

TRAFFIC CONTROL management center for 2 traffic lights (2-way)

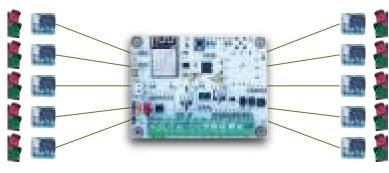
€ 217,30

PARK

Traffic light control board programmable via web app







Ability to manage up to 10 connected traffic lights on a wired network up to 1 km away





- Power supply: 230V
- Degree of protection: IP65
- Operating temperature: -20°C, +60°C
- Communication: RS485 and WI-FI
- Logic: time, reservation, mixed and parking

APE - 511 / 2060

PARK MASTER MASTER card for traffic light control

€ 534,80

APE - 511 / 2070

PARK SLAVE SLAVE card for traffic light control

€ 479,10

APE - 511 / 2080

KIT PARK n.1 PARKMASTER + n.2 PARKSLAVE

€ 1.448,20



Control of the last of the las

Photocells and safety devices



Laser detector for industrial gates and doors FLATSCAN IP66 / A50
Security sensor for industrial doors LZR / A52
Fotocellula laser per cancelli e porte industriali L36 / A54
Safety edges ACTIVE RES, ACTIVE-R3 / A56
CRASHLESS safety edges CAPTIVE / A58
Photocell MICRO-P27S / A60
Reflective photocell REFLEX / A62
Photocells INFRA16, SW50, P41, P37B / A64
Infrared protective barriers LIGI01, LIGI07 / A66
Compact synchronised photocells ARGOS / A72
Photoelectric immaterial barriers AOS124 / A73
Optics for sensor profile WS-SIGNAL 15 and LOW POWER SIGNAL / A74
Spiral cable SPK / A76
Crushing force gauge for gates and motorized doors CERTIFIKO / A77



Laser detector for industrial gates and doors

NEW



FLATSCAN IP66 is a compact, single curtain sensor composed of 400 beams, based on LASER technology, designed for use on automatic industrial doors and swing gates.

The high accuracy of laser technology ensures precise detection of people and vehicles within a range of 5.5 m x 5.5 m, in indoor and outdoor environments. The robust metal housing with **IP66 protection** rating makes the sensor suitable for installations in industrial environments and outdoor applications.















Applications on:

SWING GATES



SLIDING GATES



INDUSTRIAL DOORS



Versatile sensor orientation

Flexible mounting options on either side make the sensor easy to install in any application.

Installation height adjustable

The sensor can be installed up to 5.5 m to comply with EN 12453 standard.

Reduced unwanted detections

The anti-fog filter and additional protection settings allow on-site adjustment and reduction of environmental interference.

Robust and compact desian

The metal housing and IP66 protection rating safeguard the sensor even in harsh environmental conditions. Its small, compact size makes it easy to install even in limited spaces.

A 50 www.abexo.tech

Laser detector for industrial gates and doors





<u>Technology</u>: LASER scanner, time-of-flight measurement

Mounting height: from 2.5 m to 5.5 m

Maximum detection area: Max. 5.5 m \times 5.5 m (4 m @ 5%

reflectivity)

<u>Detection types</u>: presence <u>Radar field of view</u>: 90° <u>Tilt angle</u>: ±3° (with bracket) <u>Power supply</u>: 12 – 24 V DC ±15%

<u>Output:</u> 1 opto (galvanic isolation – polarity-free) > Max. switching voltage: 30 V AC / 42 V DC

- > Max. switching current: 100 mA
- > 1 relay (potential-free contact)
- > Max. contact voltage: 30 V AC / 42 V DC
- > Max. contact current: 1 A (resistive)
- > Max. switching power: 30 W DC / 60 VA AC

Power consumption: approx. 2.3 W, peak current = 1 A

<u>LED</u>: 1 tri-color LED: detection/output status <u>Optical characteristics (IEC/EN 60825-1):</u>

- > Wavelength 905 nm; output power < 0.1 mW; CLASS 1
- > Wavelength 635 nm; output power < 1 mW; CLASS 2 visible spot

Vibrations: < 2 G

Material / Color: Aluminum A380 – black

 $\underline{\text{Dimensions}}\text{: }124~\text{mm}\times 90~\text{mm}\times 50~\text{mm without bracket}$

Protection rating: IP66 (IEC/EN 60529)

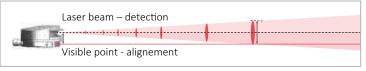
Operating temperature: -30°C to +60°C when powered

<u>Humidity</u>: 0–95% non-condensing <u>Standards</u>: EN 12453 (type D)



INSTALLATION

- 3 visible LED spots provide precise reference points to help adjust the angle of inclination
- The sensor can be mounted on the right, in the centre or on the left for easy installation
- Parameter adjustment via remote control

















Abex LZR-i100 / LZR-i110

The **LZR-i100** and **LZR-i110** detectors are based on highly accurate time-of-flight technology, ensuring optimal safety at the threshold and in the proximity of the door, with four laser curtains that define corresponding detection areas.











Two separate detection areasDoor safety during opening and closing through two distinct detection zones.



Optimised for industrial environments IP65, 10 m cable, filters against swing door deformation caused by wind, protection against door vibrations and environmental interference.



Virtual push buttons
Option to set up 2 virtual buttons to open the door







Security device for automatic swing and sliding gates

PERFORMANCE

- Adjustable detection area depth (up to 1 m) depending on installation height
- Certified safety solution for industrial doors: PL "d" / CAT 2 according to EN ISO 13849-1 and type E according to EN 12453
- High level of safety with complete three-dimensional detection in front of the door
- Small object detection *

APPLICATIONS

- Safety during door opening and closing with 2 separate detection zones
- Possibility to create 2 virtual buttons for door opening **DESIGNED FOR INDUSTRIAL CONTEXTS**
- Filters door vibrations and environmental interference
- Filters door frame deformations caused by wind
- Protection rating IP65

LZR-i110 - Maximum detection distance: $5 \text{ m} \times 5 \text{ m}$ **LZR-i100** - Maximum detection distance: $9.9 \text{ m} \times 9.9 \text{ m}$ Power supply: 10-35 V DC on connector

<u>Output</u>: 2 electronic relays (galvanic isolation – polarity-free)

<u>Maximum switchable current</u>: 80 mA (resistive) <u>Dimensions:</u> 125 mm (W) × 93 mm (D) × 70 mm (H) (mounting bracket +14 mm)

Maximum switching voltage: 35 VDC / 24 VAC

Protection rating: IP65

Operating temperature: -30°C to +60°C under power Compliance: EMC 2014/30/EU; LVD 2014/35/EU; MD 2006/42/EC; ROHS 2 2011/65/EU; EN 12453 chapter 5.1.1.6, chapter 5.5.1 Safety device E; EN 12978; EN ISO 13849-1 Pl'd'/ CAT2; EN 60529; IEC 60825-1; EN 60950-1; EN 61000-6-2; EN 61000-6-3; IEC 61496-1; EN 61496-3 ESPE Type2; EN 62061: 2005 SIL 2; DIN 18650-1 Chapter 5.7.4



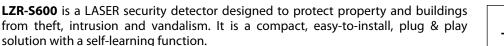




* up to a few centimeters depending on the application

Laser detector for building security and automatic doors

LZR-S600









LASER Technology









 Ability to detect small objects with a reflectivity factor of 2%

- Does not require illumination of the object to be protected (unlike standard camera systems)
- Effective protection against environmental disturbances (flight time and special software)

avisit our website for more information and complete technical specifications





Maximum detection distance: from 10×10 to 25×25 (4 planes in height, width, and depth)

Detection mode: motion and presence

Power supply: 10–35 V DC via connector

Output: 2 independent relays configurable as pre-alarm/alarm, day/night, anti-vandalism

Protection rating: IP65

Operating temperature: -30°C to +60°C under power Compliance: 2006/95/EC: LVD; 2002/95/EC: RoHS; 2004/108/EC: EMC; EN 60529:2001; IEC 60825 - 1: 2007 Laser Class 1 & 3R; EN 61000-6-2: 2005 EMC - Industrial level; EN 61000-6-3: 2006 EMC - Commercial level

APE - 790 / 1560

LASERSCAN LZR-S600

€ 2.854,00

LZR-P110

The **LZR-P110** laser detector ensures the protection of sliding doors, swing doors and revolving doors in accordance with DIN 18650 and EN 16005 standards.

LASER Technology











Maximum detection distance: 5×5 m

safety mode for sliding doors)

- Time-of-flight measurement: immune to ground reflectivity

- Free positioning of 2 virtual buttons for opening sliding doors

- Three-dimensional protection at the door threshold and near the closing area with 4 high-resolution laser curtains
- Integrated heating system and snow and rain protection filter (for outdoor use)

website for more information and complete technical specifications



nttps://bit.ly/3s9AuMy

<u>Detection mode</u>: presence <u>Power supply</u>: 10–35 V DC via connector <u>Output</u>: 2 configurable relays (e.g., slow speed and locking for revolving doors, virtual button and

Protection rating: IP65

Operating temperature: -30°C to +60°C under power

Compliance: 2006/95/EC: LVD; 2002/95/EC: RoHS; 2004/108/EC: EMC; 2006/42/EC: MD; EN 12978:2009; EN ISO 13849-1:2008 CAT2, PI "d"; EN 60529:2001; IEC 60825-1:2007; EN 60950-1:2005; EN 61000-6-2:2005; EN 61000-6-3:2006; IEC 61496-1:2009; EN 61496-3:2008 ESPE Type 2; EN 62061:2005 SIL 2; EN 16005:2012 Chapter 4.6.8; DIN 18650-1:2010 Chapter 5.7.4; BS 7036-1:1996 Chapter 8.1

APE - 790 / 1510

LASERSCAN LZR-P110

€ 1.932,00

LZR-H100 ACCESSORY

APE - 790 / 0103 CTRL REMOTE CONTROL > see page A96

€ 54,60

APE - 790 / 11BA



€ 86,50

ACCESSORY ONLY FOR LZR-H100

APE - 790 / 1185



SUPPORT BRACKET FOR LZR-H100

€ 545,90

Laser technology sensor for industrial gates and doors



L36 NEW

L36 is an innovative photocell based on time-of-flight (ToF) laser technology, designed for use on gates as a security device.

Compared to traditional photocells, it does not require two devices or reflectors.

L36 uses a laser rangefinder to measure the distance to an obstacle.





The photocell can be used in 3 different modes:

Mode A **OPERATION AS A PHOTOCELL**

This mode requires a fixed physical reference point opposite the laser rangefinder. Maximum detection distance: 9 m.

The photocell analyses two events. Obstacle detection at shorter distance than the stored distance, during the learning phase.

9 metres

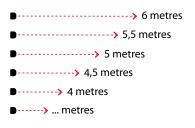
Mode B **OPERATION AS A PROXIMITY SENSOR** (APPROACH PERPENDICULAR TO THE LASER BEAM)

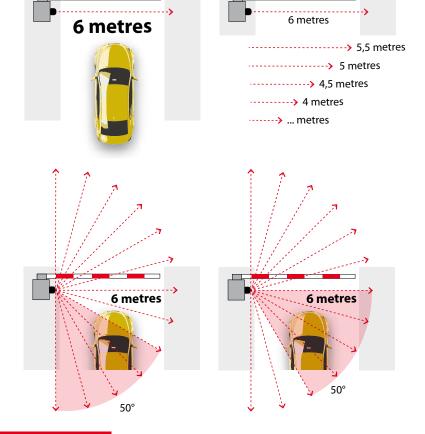
Maximum reading distance 6 m, optimised for detecting movements perpendicular to the beam.

The reading distance is programmable and can be adjusted in increments of 0.5 m during programming.

Mode C **OPERATION AS A SENSOR APPROACHING THE** PHOTOCELL FROM ANY DIRECTION

Maximum reading distance 6 m, optimised for detecting movements approaching the photocell from any direction. The reading distance is programmable and can be adjusted in increments of 0.5 m during programming.





A 54 www.abexo.tech

Laser technology sensor for industrial gates and doors









INSTALLATION

Optical and acoustic signals: The device communicates its operating status and measurement results via optical and acoustic signals, facilitating diagnosis and setting.

Power supply: 12-24V AC/DC Transmission/reception angle: +/- 25°

Head rotation angle: 180°

Maximum range

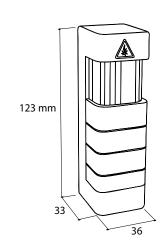
Mode A: 9 m Modes B and C: 6 m

Maximum output load: 30Vdc, 0.5A

Operating temperature: -10°C to +60°C

Protection class: IP54 Dimensions: 36x123x33 mm

Weight: 69 g











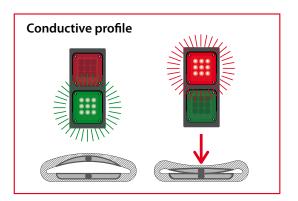
Abex ACTIVE-RES





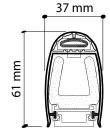


Easy to install and can be shortened to size, **ACTIVE-RES** is using conductive technology in a small sensitive edge. The safety device ensures a rapid response to impacts along the entire length of the structure.









TECHNICAL FEATURES

- Operating temperature: -20°C, +55°C

- Degree of protection: IP65

-⁄///-8,2 κΩ



Guaranteed safety over the entire length of the edge including headers

CONTROL BOARD FOR RESISTIVE SENSITIVE EDGES 8,2K

Equipped with two channels, ensures continuous system self-checking, which is blocked in the case of faults.

Available in protection category 2 PL D (IMQ-certified)



¬////-8,2 κΩ



APE - 563 / 4455

control board category 2

€ 105,44

APE - 563 / 4412

length 1,20 mt

€ 108,81

APE - 563 / 4416

length 1,60 mt

€ 129,21

APE - 563 / 4420

length 2,00 mt

€ 148,85

APE - 563 / 4425

length 2,50 mt

€ 173,79

Radio safety edges

ACTIVE-R3



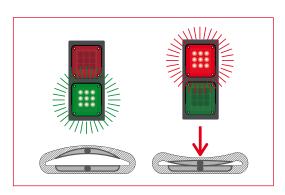












FEATURES RADIO / receiver RU

- Receiver 868 MHz in box
- 2 relay outputs with selectable operating modes
- Memory 6 COSTA ACTIVE-R (3 in relay 1, 3 in relay 2). By programming, an edge can activate 2 relays simultaneously
- Power supply: 12/24V ac/dc
- Consumption in rest/operation: 18 mA/80 mA
- Entry of self-check: 2 inputs 0/12/24 V ac/dc with selectable polarity
- Operating temperature: -20°C, +85°C
- Sealing: IP54 (IP65 with cable gland)
- Carton dimensions: 82 x 190 x 40 mm

JCM - 1003190

3G RB3 R868

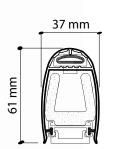
€ 95,10



TECHNICAL FEATURES







ACTIVE-R3 is a small sensitive edge with conductive technology that guarantees a quick response to any impact (along the whole length of the body).

The ACTIVE-R3 edge is easy to install and can be shortened to make it suitable for any kind of need.

TECHNICAL DATA

- Operating temperature: -20°C, +55°C
- Degree of protection: IP65
- Capacity: 40 mt
- Frequency: 868 MHz
- Integrated bidirectional 868 MHz Transmitter
- Power supply: two lithium batteries 3,6V cod. BATT3.6V (included)
- Battery life: about 2 years

APE - 563 / 3312

length 1,20 mt

€ 210,60

APE - 563 / 3316

length 1,60 mt

€ 229,50

APE - 563 / 3320

length 2,00 mt

€ 246,30

APE - 563 / 3325

-MW-

8,2 κΩ

length 2,50 mt

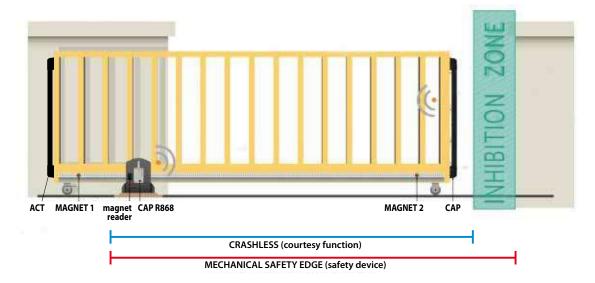
€ 269,70



CAPTIVE







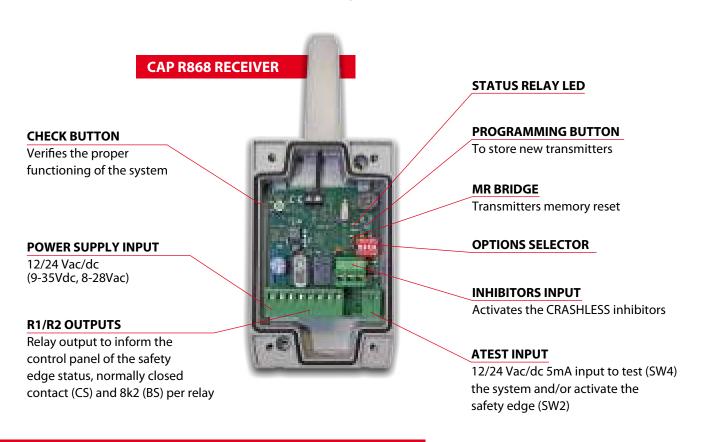
The resistive safety edge, CAP (8,2 k Ω) is a class 2 safety device.

The CRASHLESS courtesy function allows detecting obstacles and avoiding the impact with them (people, car, obstacles in general).

The inhibition magnets have a double function:

- Deactivate the capacitive part when the gate is not moving, saving energy from the battery
- During the closing movement, they deactivate the crashless function (the capacitive device would read the column of the gate as an obstacle) keeping the safety edge active.

We recommend synchronizing the inhibition of the crashless function with the slowing down of the engine to be within the limits of the impact force set out in the regulations in force.



A 58 www.abexo.tech

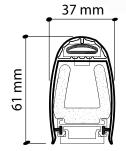
Photocells and safety devices/

Sensitive safety edges



CAP

- Mechanical safety edge with integrated transmitter and CRASHLESS technology
- Operating frequency: 868 Mhz
- Operating consumption: 12 mA





APE - 563 / 0012

CAP12 lenght 1,2 mt

€ 257,40

APE - 563 / 0016

CAP16 lenght 1,6 mt

€ 277,50

APE - 563 / 0020

CAP20 lenght 2,0 mt

€ 298,60

APE - 563 / 0025

CAP25 lenght 2,5 mt

€ 323,10



CAP R868

receiver

- Receiver for resistive, mechanical and optical safety edges
- With the CAP transmitter it allows to activate and deactivate the CRASHLESS technology
- Nominal capacity: 50 m
- Memory: 6 transmitters
- Output: 2 relays
- Power supply: 12/24 Vac/Vdc 10%
- Relay contact: 1
- IP54 (IP65 with stuffingbox)
- Radiated power: < 25 mW
- Operating temperature: -20°C, +55°C
- Dimensions of the box: 82x190x40mm



CAP MAGIN

magnets

- Inhibitors detector, with 2 magnets
- Dimensions of the detector: 67x35x20mm
- Dimensions of the magnets: 51x35x15mm
- Distance detector-magnet: 20mm max
- Cable length: 2 m



IT WORKS WITH EMITTER: RB3 T868, RB3 TGL868, RB3 TGLA868 e CAP

JCM-1006158

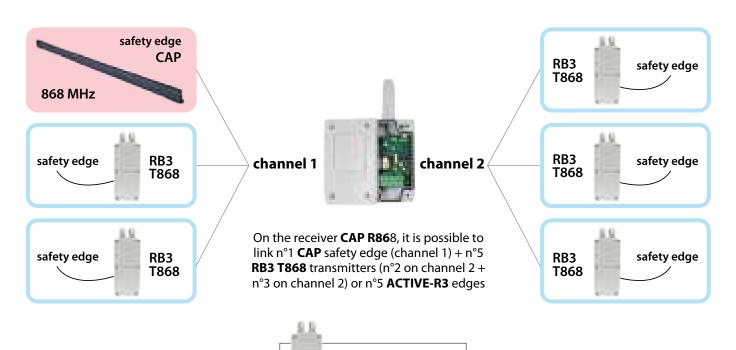
CAP R868 receiver

€ 139,40

JCM-1004455

CAP MAGIN

€71,80



Transmitter RB3 T868



Abexo MICTO-P27S





Once again Abexo has given an answer to the demand of customers and installers, innovating the industry of gates' photocells. Indeed, having noticed the tendency to reduce the size of the pillars, Abexo has created a small photocell, easily adaptable to the limited space of the accessories. Besides the functionality, the aesthetic factor matters as well. The new photocells are almost "invisible" to the eye and well camouflaged.

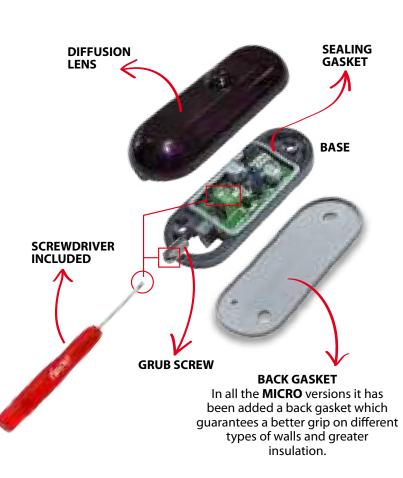
The design was thought taking inspiration from the one of the Micro-Flash e Micro-Traffic, miniaturized and equipped with terminals. To maintain compact dimensions and guarantee maximum performance, an innovative choice was made: using a relay (miniaturized as well) with **REED technology**.

In the Reed relay the classic electromechanical contacts are replaced by Reed contacts, wrapped in an excitation coil: when it generates the magnetic field, the latter closes the contact, without the intermediation of lever systems.

The absence of lever systems of the relay REED allows:

- a greater miniaturization
- a long average life span (usually much higher than a million of switchings)
- a greater supply range than traditional relays (REED relays are considered reliable and have a wide range of plants by different producers).

The photocells P27S enclose all the characteristics above.



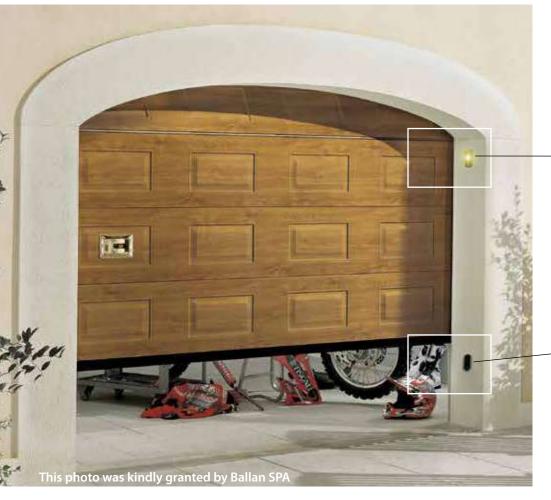


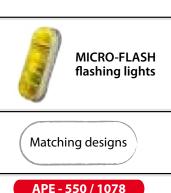




Photocell with width 27mm









MICRO-P27S allows to select, through a jumper: output 8k2 (SW1=open) or short (SW1=closed), (default).







TECHNICAL DATA

Power supply: 12/24 Vcc/ca Absorption: 60 mA Relè: REED TECHNOLOGY

Synchronism: yes

Max length of the door: 15 m Relay contacts: 0,5 A - 24 V Oscillation frequency: 1500 Hz Light type: modulated infra-red Operating Temperature: -20°C, +60°C Weight plastic: 12gr





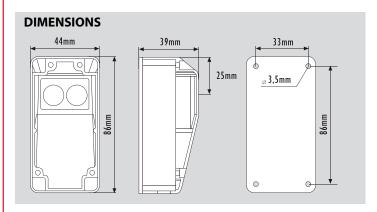
REFLEX

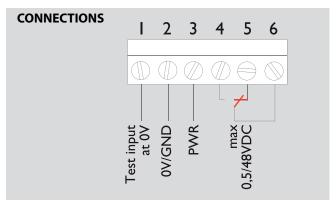




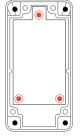
- QUICK AND EASY INSTALLATION REQUIRES THE WIRING FROM ONE SIDE ONLY.
- ON THE OTHER SIDE A REFLECTOR IS FIXED AT THE SAME HEIGHT OF THE PHOTOCELL.
- ALIGNMENT BETWEEN REFLECTOR AND PHOTOCELL IS FACILITATED TO POSITIONING LED (SEE DETAIL DRAWING "ADJUSTMENTS").
- THE FORM REFLECTOR VARIES DEPENDING ON THE RANGE UP TO 8MT. (Rectangular), UNTIL 12m. (ROUND) AND UP TO 15MT. (SQ).
- EXCELLENT RELIABILITY GUARANTEED BY A WIDE RANGE OF ACCESSORIES FOR PRESERVING THE PHOTOCELL FROM CONDENSATION, RAIN, REFLECTIONS AND SHOCK

FEATURES

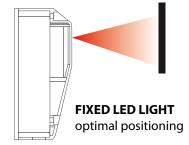


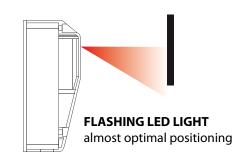


SETTING



Optimal installation after assembly 3 screws beam adjustment





SAFETY

THE LIGHT BETWEEN PHOTOCELL
AND REFLECTOR IS POLARIZED
AND SO THE REFLEX IS IMMUNE TO
"DIRECT" REFLECTIONS EXAMPLE:
CAR WITH METALLIC PAINT.



(OLD TECHNOLOGY)



POLARIZED REFLECTION (NEW TECHNOLOGY)



www.abexo.tech

Polarized light photocell







APE - 589 / 0080



REFLEX photocell kit consists of: photocell polarized light + Rectangular reflector 8m. range + anti-condensation accessory

€ 94,80

APE - 589 / 0100



REFLEX photocell kit consists of: photocell polarized light + Round reflector 12m. range + anti-condensation accessory

I TECHNICAL SPECIFICATIONS

VOLTAGE	1036 VDC / 24 VAC 25%				
OPERATIONS	< 100m	s in power			
CONSUMPTION	max 30mA/24V				
TYPE OF LIGHTS	680nm				
CONE ANGLE	approx.	1,50 total angle			
DELAY	< 10ms				
RANGE	with AP	E-589/8150 = 15mt			
	with AP	E-589/8120 = 12mt			
	with AP	E-589/8110 = 8mt.			
CABLE CONNECTI	ONS	max 1,5mm2			
PROTECTION DEG	REE	IP67 to DIN 40050			
OPERATING TEMP	RATURE	-25° / +60° C			
WEIGHT		approx. 60g			

€ 96,80

APE - 589 / 8110



Rectangular reflector 8m. range - width = 30mmheight = 81mm

€ 14,40

APE - 589 / 8120



Round reflector 12m. range - 82mm diameter

€ 15,50

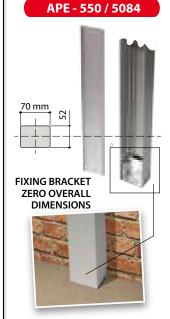
APE - 589 / 8150

DIMENSIONS (LxWxH)



Square reflector 15m. range - W. / H. = 100mm

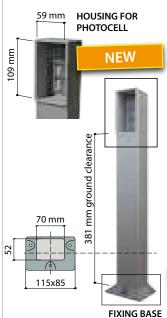
€ 25,80



PFZ - Non-overhanging fixing base for Dorica, developed to be able to install the column touching the wall. Accessory to replace the standard 115x85 mm base

€ 17,00

APE - 550 / 5041



115x85 mm **DORICA 50 CAP** Column h=500 mm with

housing and fixing base

in TECHNOPOLYMER € 57,70

APE - 589 / 0200



Black enclosure protection from rain, shock and reflections

€ 10,30

DISCOVER THE

ENTIRE RANGE OF DORICA

COLUMNS

on page A128

APE - 589 / 8122

86x44x39 mm





Protective Black Case from rain, shock and reflections for round reflector

€ 10,30

APE - 589 / 2000



Pair of universal brackets for Reflex and reflector positioning

€ 20,60





INFRA 16 Synchronized photocells



TECHNICAL DATA

- Power supply: 12/24 Vdc/Vca

- Absorption: 60 ma - IR wavelenght: 880 nm

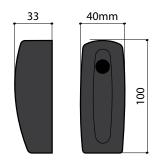
- Operating temperature: -20°C to +60°C

- Relay range: 1A - 24V

- Synchronized mode: only if powered with alternating current

- Modulation frequency: 1500 Hz

- Range: 20 m



APE - 150 / 8508

Photocells INFRA 16

€ 64,70

SW50

Photocell for recessed mounting





Interchangeable with the most widely used recessed photocells on the market.

SW50 is a photocell for recessed mounting with an estimated range of 20 mt. Its dimensions and the shape of the recess bracket make this photocell a great alternative to the existing models on the market.

Power supply: 12/24 Vdc/ac Absorption: 35 ma I.R. wave lenght: 950 nm Operating temperature: -20° to +60° C Relay capacity: 1A – 24V Synchronized mode: only with alternating voltage Modulation frequency: 1500 Hz Range: 20 m

APE - 528 / 2022

SW50 - Photocell for recessed mounting

€ 64,10

A 64 www.abexo.tech

Orientable photocells

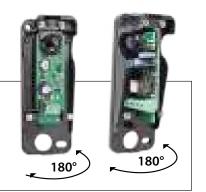


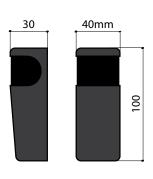


P41
Orientable photocells



The infra-red board can be rotated 180 degrees to allow alignment between the transmitter and the receiver, even where the fixing points are not perfectly in line.





TECHNICAL DATA

- Power supply: 12/24 Vdc/Vca
- Absorption: 60 ma
- IR wavelenght: 880 nm
- Operating temperature: -20°C to +60°C
- Relay range: 1A 24V
- Synchronized mode: only if powered with alternating current
- Modulation frequency: 1500 Hz
- Range: 15 m

APE - 528 / 1022

Photocells P41

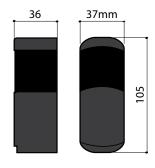
€72,50

P37B Battery-powered orientable photocells









TECHNICAL DATA

Receiver:

- Power Supply: 12/24 Vcc/ca

Absorption: 35mARelay Range: 1A-24V

- Range: 10-15m

Transmitter:

- Power Supply: 3V (n.2 alkaline batteries AAA 1.5V)

- Absorption: 25mA

- Range: 10m (open PJ)/15m (closed PJ)

- Operating temperature: -20°C to +60°C

APE - 528 / 1037

Photocells P37B

€ 94,80











Advantages

- Eliminates sensitive edges on the door
- Easy to install due to compact dimensions (16x16mm)

No impact force measurement required, prevents collision

- Ideal for doors up to 10m wide
- Highly insensitive to environmental influences and highly resistant to vibrations
- IP67 protection rating, fully resin-coated
- Simple and direct mounting on the door (Ø4mm through holes)
- Easy adjustment of the barrier with LED display



Certifications

The LIGI model has passed the CE examination at the TÜV Nord certification body in compliance with the requirements of EN 12978 / EN ISO 13849, Cat. 2, PLd / IEC 61496-2 / EN 12445 Chap. 7 / EN 12453 Chap. 5.5.1 / Devices C+D and E without limitation, and has obtained the corresponding certification.

Opening angle conforms to the standard

The LIGI model meets all the requirements of EN 12978, including the required opening angle specified in Chapter 4.3.3 of max. ±5° for transmitters and receivers.

Intelligent functions – simple installation

The safety-related opening angle requirement of $\pm 5^{\circ}$ is no problem for the installation of the LIGI model.

Mechanically adjustable clamps and a software adjustment mode are available for this purpose.

In this mode, the reception strength of the optical signal is displayed on the LED indicator via the variable flashing frequency. This ensures the best possible signal reception and, consequently, perfect mutual alignment of the transmitter and receiver when the diode's flashing frequency is at its maximum.

Maximum operational safety

The LIGI model is not very sensitive to external light, so much so that even direct sunlight does not limit its operation. Even with regard to electromagnetic interference (EMC), such as that which can occur with door drives using frequency converters in the low frequency range, the LIGI model is immune to interference.

Modernisation of older door systems

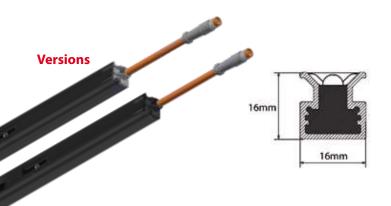
The photoelectric barrier is perfectly adaptable to the conversion or modernisation of door systems that cannot comply with the maximum closing forces required.

Special versions for lower door heights

For door heights where it is not possible to install the complete LIGI model, such as in underground parking areas (monitoring zones with risk of falls), we offer a variant with the electronics positioned lower. In this way, it is possible to monitor the entire height of the door, even below 2500 mm, without gaps in the protection field.







version A

- for high-speed doors
- 56 beams for 2.5 m, one beam every 45 mm

version C

- for all other types of closures/automations
- 23 beams for 2.5 m, one beam every 45 mm up to a height of 500 mm, then one beam every 180 mm

Types of mounting brackets



90-degree mounting

supplied with bracket
Optional accessory > see page A69

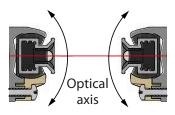
for replacement > see page A69



Installation

The cable connection must always be located at the top.





Optical axis alignment

Align the optical axis of the transmitter and receiver by bringing them closer together and carry out the electrical connection of the LIGI (see operating instructions)

Signal output versions

OSE

The LIGI-OSE light barrier can be operated directly by all control devices via the OSE signal input as a safety edge

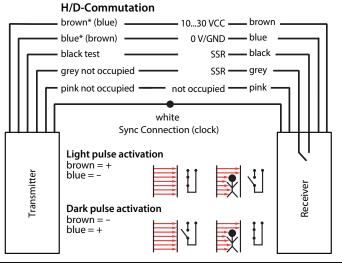
PNP signal input

The LIGI-PNP photoelectric barrier can be operated directly by all control devices through a PNP signal input (pulse) as a safety edge. Through the test input in the transmitter bar, the system can be tested for safety functionality using the control device.

SSR

The output of the LIGI-SSR version is a solid-state relay (transistor) that provides a pure NC (normally closed) or NO (normally open) contact to control the input of a control unit for automation.

It provides high performance characteristics using transistor semiconductor technology, particularly in applications where a high switching frequency is required.



* NC-NO switching of the output contact by inverting the polarity of the operating voltage for the transmitter (not available on OUTDOOR versions)





BLANKING FUNCTION

The barriers identify the interruption of the beams caused by the door closing movement from top to bottom without stopping the operation. If the movement is stopped for more than 1.5 seconds during the manoeuvre, the interruption is signalled. The free zone is signalled only after the door has been completely opened, after which unassisted closing is possible.

Technical specifications

reeminear specimeari	5115			
Safety parameters	BWS Type 2 in conformity with IEC 61496-2; MTTFD > 100 years; DCAVG > 99% Category 2; PL d (PFH=7.33.10-9 1/h) in conformity with standard EN 61508-2; Category 2 for LIGI-xx-Nxx, LIGI-xx-Pxx and LIGI-xx-Rxx only with external control adapted for testing.			
Door width	1,610 m			
Rated voltage	24 V CC -58% +25% (1030 V CC)			
Current consumption	Transmitter: approx. 30 mA (24 V DC) Receiver: approx. 20 mA (24 V DC)			
Power consumption	approx 1,2 W			
Protection zone height	max. 2520 mm			
Number of channels	max. 57			
Type of photocell	infrared modulated			
Switching type	light present, i.e. free protection zone: OSE output = alternating signal (approx. 950 Hz) PNP output = High level NPN output = Low level Semiconductor relay = low ohmic resistance			
Opening angle	approx ±5°			
Detection range	0500 mm, object to be detected >= 50 mm - 5002520 mm, object to be detected >= beam distance +5 mm			
Door operation	Max. door speed: - (variant A; closing strip > 100 mm) = 1,1 m/s - (variant A; closing strip > 125 mm) = 1,3 m/s - (variant C; closing strip > 370 mm) = 1,3 m/s			

OSE output	Approx. 950 Hz, alternating signal, 4 V 20 mA short-circuit proof, protected against reverse polarity, max. 100 nF, max. 30 μ A leakage current Integrated pulldown resistor of 220 Ω
PNP output	100 mA, short-circuit proof, protected against reverse polarity, max. 220 nF, max. 350 μ A leakage current, pull-down resistance 10 k Ω 4 k7 (recommended value range) must be present.
NPN output	same as PNP output but with max. 150 µA leakage current
SSR output	100 mA, short-circuit proof, max. 220 nF, max. 30 V CC, max. 21 V AC, semiconductor relay R on $<$ 35 Ω , leakage current $<$ 100 μ A.
Light immunity environment	>= 100 klu
Housing material	Die-cast aluminium profile with two-component epoxy resin
Connection	M8 pig-tail connector, 4-pin, L = 130 mm
Protection degree	IP67 conformity with standard EN-60529
Operating temperature	-20°C, +60°C
Storage temperature	-30°C, +70°C
Maximum air humidity	95%
Weight	approx. 1860 gr
Dimensions	2640 x 16 x 16 mm (L x P x H) Length corresponds to the maximum protection zone height of 2520 mm

Extended requirements

TÜV has outlined a scenario of potential risks that should be detected through the use of a photoelectric barrier.

In case of a residual opening greater than 50 mm, the door stops. If in this position, the test piece B (Ø 50 mm) penetrates into the remaining part of the protection field, the barrier must detect it as an obstacle.

Furthermore, the Conference for the exchange of experiences on automatic door and gate systems, which took place on 29 October 2013 in Nuremberg, marked a further development in safety for the application of photoelectric barriers as protective devices for gate systems, raising the regulatory field for the detection of test piece B (Ø 50 mm) from 300 mm to 500 mm above the ground. The LIGI model complies with the increased requirements.

Price list - versions for manufacturers

OSE (version A)	WI-318725	PNP (version A)	WI-317339
Active height 2295mm Total height 2415mm	€ 738,40	Active height 2520mm Total height 2640mm	€ 752,20



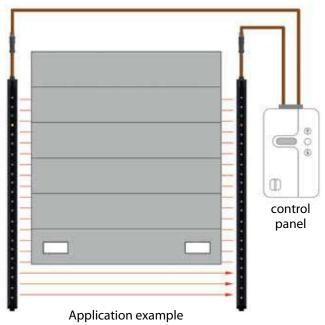


Applications

Vertical doors with LIGI installation in guide/axis with the gate > BLANKING FUNCTION

OUTPUT SSR

The LIGI barrier is designed for industrial doors and has been TÜV-Nord certified.





HA = active HT = total (mm)	SPEED DOORS version A	price	HA = active HT = total (mm)	VERTICAL CLOSURES version C	price
HA = 1485 HT = 1605	WI-319476	€ 689,60	HA = 1530 HT = 1650	WI-322794	€ 645,10
HA = 1710 HT = 1830	WI-319479	€ 704,50	HA = 1710 HT = 1830	WI-322796	€ 650,30
HA =1890 HT = 2010	WI-319063	€ 715,10	HA =1890 HT = 2010	WI-318928	€ 655,70
HA = 2115 HT = 2235	WI-319482	€ 727,80	HA = 2070 HT = 2190	WI-318934	€ 661,00
HA = 2295 HT = 2415	WI-320886	€ 738,40	HA = 2250 HT = 2370	WI-318940	€ 666,30
HA = 2520 HT = 2640	WI-318922	€ 752,20	HA = 2520 HT = 2640	WI-318949	€ 671,60

LIGI Accessories

FERRITE KIT

Pair of ferrites for filtering electromagnetic interference



WI-320637

€ 20,00

Power supply 230/24V 0,5A - 12W





TECHNICAL DATA

AC input voltage: 100÷240 Vac Output voltage: 24 Vdc

Nominal c/lout current: 0,25÷0,13 A

Output current: 0,5 A

APE-143/0024

€ 33,20

For additional information, see page A138

Outdoor version (for external use)
Sliding doors and gates
with SSR output with application
outside the door movement.

Contact customer service

MOUNTING ACCESSORIES

90° mounting bracket
with bracket supplied
(pack of 10 pec, pot available)

(pack of 10 pcs, not available for individual purchase)

WI-316111

€ 43,00

pack of 10 pcs, not separately available

Mounting with ADJUSTABLE SUPPORT (spare part) (pack of 10 pieces, not available individually)



The rubber insert must have its edges facing upwards!

WI-316991

€ 45,00

pack of 10 pcs, not separately available

LIGI07

Photoelectric immaterial barriers for sectional and high-speed doors









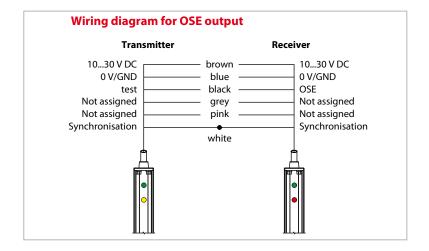


- Very compact design
- Long range
- Integrated electronics
- Adaptable to different types of installations

As with all other Witt products, the LIGI 07 barrier has been specifically designed to operate in the harsh conditions typical of industrial gates. The super-compact, integrated design measures just 12x15mm, offering perfect protection against the humidity and vibrations typical of automatic door installations.

The LIGI 07 barrier sets new standards for the future with state-of-theart electronics and intelligent firmware.

It is compatible with all standard control units for automation and can be used with almost all existing systems.



Error diagnostic indicators

Error diagnosis via LED indicators

	Transmitter	Performance	Receiver	
Current tension absent	8		8	Power Supply check
Reverse polarity on the receiver	$\begin{array}{c} \otimes \otimes \otimes \otimes \\ \mathbf{\dot{\Omega}} \mathbf{\dot{\Omega}} \mathbf{\dot{\Omega}} \otimes \end{array}$	LED flashing 3 times, long pause	⊗ ⊗	Check the voltage at the receiver terminals
Short circuit output		LED flashing red twice, long pause		Verify the power supply at the relay output
Failed alignment		LEDs flash 3 times, long pause		Check the synchronisation connection between the receiver and transmitter
Internal error		All LEDs are flashing		The barrier must be replaced

Legend: ● Fixed LED

☆ Flashing LED

⊗ LED off

- For doors up to 10 m wide
- Can be installed in the door jamb with the BLANKING feature (beam cancellation)
- Extremely robust, all components are integrated into a single metal body
- Pre-drilled with front holes for direct mounting
- Available with OSE output or solid-state relay (SSR)
- Electronic self-alignment
- Integrated diagnostics
- Highly resistant to external optical interference
- Compact size: only 12x15mm

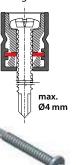
Technical specifications

· ·	
Passage width	1,6 - 10 m
Operating voltage	10 - 30 Vcc
Current consumption	Transmitter: approx. 30 mA (24 Vdc) (24 Vdc) Receiver: approx. 20 mA (24 Vdc)
Power consumption	approx 1,2 W
Optical emission	modulated infrared
OSE output	Approximately 950 Hz, alternating signal, 4 V 20 mA, short-circuit protection and protected against polarity reversal
Maximum leakage current	max 30 uA
Pull-down resistance	220 ohm
Output	SSR solid state relay 100 mA, protected circuits
Intrinsic capacity	220 nF, max. 30 Vcc, max. 21 Vca, Rs on < 35 ohm
Response time	< 100ms
Reboot time	< 400 ms
Environment lighting	> 100 klux
External material	Fully resin-coated aluminium profile
Connector	6-pin M8 plug
Certification	IP67, EN60529
Operating temperature	-20°, +60°C
Storage temperature	-30°, +70°C



Caution!

Using screws larger than 4 mm in diameter may damage the electronics



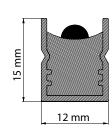
A 70 www.abexo.tech

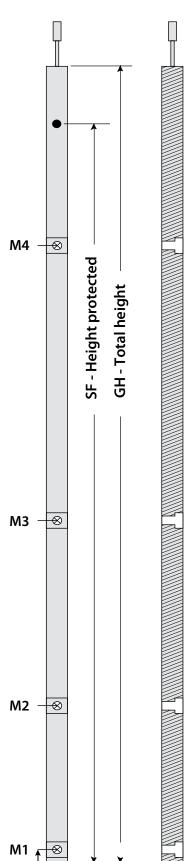
Photoelectric immaterial barriers for sectional and high-speed doors











Available versions:

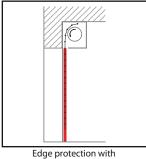
- OSE output with blanking function (gradual beam blanking during door downward movement)
- SSR output (solid state relay) selectable NC/NO, with blanking function

LIGI 07 can ONLY be installed on high-speed doors

All LIGI 07 models are equipped with a 6-pin plug and two cables measuring 5 and 15 metres.

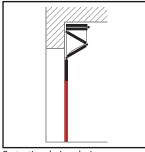
Model	Number of spokes	SF	GH	Item code with SSR output	Item code with OSE output	Price
version "C"						
07 - C20	23	2430	2555	APE-589/321003	APE-589/321033	652,00€
07 - C19	22	2250	2375	APE-589/321006	APE-589/321036	646,80€
07 - C18	21	2070	2195	APE-589/321009	APE-589/321039	641,70€
07 - C17	20	1890	2015	APE-589/321012	APE-589/321042	636,50€
version "A"						
07 - A54	54	2430	2555	APE-589/320985	APE-589/321015	725,10€
07 - A51	51	2295	2420	APE-589/320988	APE-589/321018	716,90€
07 - A48	48	2160	2285	APE-589/320991	APE-589/321021	709,70€
07 - A46	46	2070	2195	APE-589/320994	APE-589/321024	704,50€
07 - A43	43	1935	2060	APE-589/320997	APE-589/321027	696,30€
07 - A40	40	1800	1925	APE-589/321000	APE-589/321030	688,00€

High-speed / Roll-up doors



guide installation

Vertical folding doors

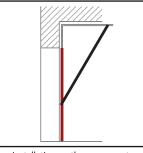


Protection during closing movement with guide installation

Sectional doors

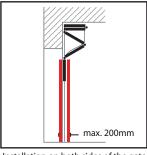
Barrier installation on both sides of the gate, with a threshold of up to 160 mm

Swing doors



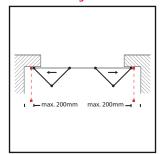
Installation on the movement plane of the end of the gate

Vertical folding doors



Installation on both sides of the gate when installation inside the guide is not possible

Folding doors



Pivot point protection

ARGOS

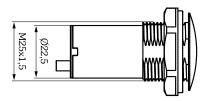


The **ARGOS** photocell is a barrier sensor designed for flush mounting directly into structural profiles, ensuring discreet and secure installation. Advanced technology ensures reliable detection, resistance to environmental conditions, and optimal integration into any type of structure.



- Synchronised (2 pairs)
- Wear-free semiconductor relays
- Clogging indicator
- Insensitive to stray light
- IP67, electronics fully encapsulated in resin
- Pre-wired: cable length 4m

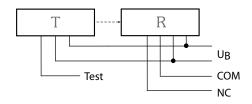


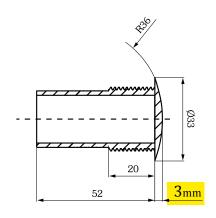


The wide opening angle ensures operation even in the event of angular deviations due to installation.

The M25 model complies with standardised cable gland dimensions.

The high level of protection of the enclosure structure is ensured by the installation of a sealing gasket.





Technical specifications:

Operating voltage: 10÷40 Vdc / 10÷30 Vac Door width: 1÷20 m (pre-set) Output: semi-conductor output NC contact: potential-free / test input

LED indicators:

Transmitter: green LED Receiver: red LED

Connection:

Transmitter: 3x0.25 mm² Receiver: 5x0.25 mm² Protection degree: IP67 fully encapsulated



(*) The set includes:
- Transmitter with 4 m cable
- Receiver with 4 m cable



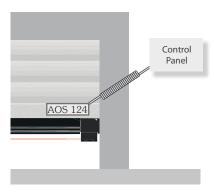
A 72 www.abexo.tech

Photoelectric immaterial barriers for sectional and high-speed doors

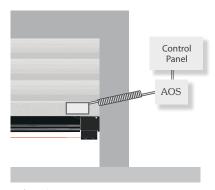
AOS124

NEW

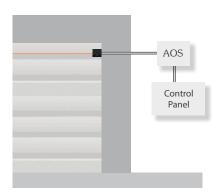
OSE signal converter for LIGI07



OSE safety device Panel mounting



Safety device



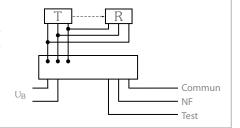
Protection against the risk of entrapment



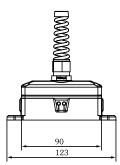
Advantages

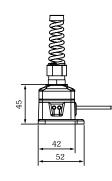
- 1 input for 1 OSE device
- 1 relay output + test input
- NO or NC relay output
- LED indicators for input and output status
- Category 2 device, compliant with ISO13849-1 standard

The AOS124 signal converter allows a LIGI light curtain with OSE output to be adapted to control panel that do not have this technology. The OSE signal is converted into a relay signal (potential-free).









Technical specifications

1935 VCC o 1930 VCA	
1x OSE signal	
Relay/TEST inputs	
Yellow LED	
Cat. 2, ISO 13849-1	
IP65	

Package includes: AOS124 card, LAD2 case, seals, M16 protective spiral screw

APE-589/322865

AOS124 signal converter set AOS124

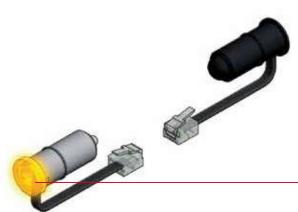
€83,40

WS-SIGNAL 15

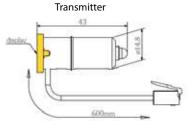


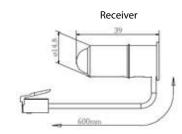
The **WS-SIGNAL 15** optical probe profile device is equipped with an integrated diagnostic system that provides an output indicating the quality of the rubber profile. This system is integrated into the transmitter, so no other measuring instruments are required. All visible LED indicators show the switching states.

This enhances operational safety and is also useful for maintenance operations. The precise self-calibration of the sensors ensures consistent switching behavior across all door widths.



- RJ connector compatible with Hörmann control panels
- Diagnostic system with integrated LEDs
- Switching status indicators
- Insensitive to wind loads and bending
- High immunity to electromagnetic interference (EMC)
- Protection against polarity reversal and short circuits
- Regulated transmitted power





Technical specifications

Optical range	From 1 to 12 metres, depending on the quality of the rubber profile	
Operating voltage	From 10 to 16 VDC, with reverse polarity protection	
Electricity consumption	40 mA (±2 %)	
Light type	Pulsed infrared, 880 nm	
Diagnostic display	Yellow LED ring for rubber profile diagnostics, flashes from 1 to 16 pulses	
Operating display	Yellow LED ring lights up when the safeguard edge is activated	
Signal output	transistor, max. load 20 mA, protected against short circuits	
Output level	rectangular signal – low: 0 to 1 V / high: 3 to 5 V	
Signal frequency	usually 900 Hz	
Materials supplied	Transmitter: ABS plastic Receiver: Lexan, IR transparent	
Connection cable	PVC, 600 mm with modular connector	
Protection degree	IP67 according to EN60529, encapsulated with 2K epoxy resin	
Operating temperature	-25°C,+60°C	
Storage temperature	-25°C,+75°C	
Weight	of receiver: 21gr of transmitter: 20gr	

For installation on doors with a modular connector system. The WS-SIGNAL optical safety device is an innovative, high-quality product equipped with a modular connector compatible with the Hörmann SKS system.

Diagnostics

After the electronics are powered up, the system evaluates the quality of the rubber profile. The result is displayed as a series of flashes from the LED indicator light, visible on the outside of the profile:

- 01 to 06 flashes: optimal conditions
- 07 to 14 flashes: good conditions
- 15 to 16 flashes: the safety profile is still functional, but operational safety cannot be guaranteed in the long term. It is recommended to check the rubber profile for possible damage or impurities.

To restart the diagnostics, simply disconnect and then reconnect the power supply.

After the diagnostic indication, the device automatically switches to standard mode, and only the yellow LED lights up when the light beam is interrupted.

Box includes: - nr.1 transmitter unit - nr.1 receiver unit

APE-589/318968

WS-SIGNAL 15 Optical sensors for sensitive security edges

€ 80,30

A 74 www.abexo.tech

LOW POWER SIGNAL



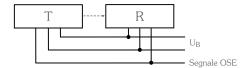




- Universal sensor profile
- Extremely low power consumption
- Integrated diagnostic system with visual display
- LED indicator for switching status
- OSE output signal
- IP 67, fully protected electronics

The **LOW-POWER-SIGNAL** automatically selects the output frequency depending on the connected device: safety signals transmitted to a battery-powered radio link will therefore have a lower frequency than if they were sent directly to the control panel via a spiral cable.

This increases battery life and ensures compatibility with most control panels on the market.



<u>Diagnostic</u> <u>system</u> <u>with</u> <u>visual</u> <u>display</u>: the LOW-POWER-SIGNAL safety edge tests the rubber profile for optical quality after engagement. The optical quality results from the rubber compound, door width, deflection, dirt, etc. The optical values of the rubber profile are indicated by a flash code of 1 to 3 pulses.

1 flash = optimal condition; 2 flashes = good condition; 3 flashes = operational limit reached.

<u>Switching status indicator LED</u>: activation of the device is indicated by a steady yellow LED.

<u>For wide doors</u>: the LOW-POWER-SIGNAL has been developed using a new optical system, which allows for significantly greater door widths of up to 12 metres.

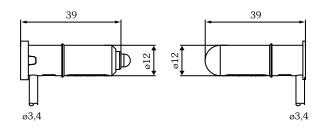
<u>Less sensitive to wind loads and bending</u>: LOW-POWERSIGNAL exhibits improved switching performance in difficult conditions, due to its optical characteristics and new adjustment method.

<u>High immunity to electromagnetic interference</u>: the LOWPOWER-SIGNAL has high immunity to electromagnetic interference produced by motors with inverters or static discharges from PVC panels.

<u>Resistant to voltage reversals and short circuits</u>: the LOWPOWER-SIGNAL is immune to incorrect wiring.

<u>Regulated transmission power</u>: improved regulation of the transmission power allows for approximately equal closing forces at different door widths.

<u>Full compatibility</u>: the LOW-POWER-SIGNAL is compatible with all control panel and radio bridge systems on the market.



Technical specifications

Power supply	327 VCC	
Maximum door width	112 m	
Output	OSE signal	
Warning lights	Yellow LED indicator	
Connections	3x0,14 mm ²	
Protection degree	IP67, electronics encapsulated	
- rotection degree	in epoxy resin	

APE-589/316397

LOW POWER SIGNAL Optics for sensitive security edges

€ 62,80

Box includes:

- Transmitter with 1 m cable and Molex connector
- Receiver with 10.5 m cable and Molex connector

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Spiral cable

SPK





SPK spiral cables are made from high-quality materials, making them suitable for the most intensive installations. The extension factor is four times the block length (BL).

Spiral cables are resistant to microbes, hydrolysis and almost all mineral oils, thanks to a special sheath compound.

In addition, spiral cables are UV-stable and halogen-free.

The material is black PUR/PUR, the colour of the wires complies with DIN 47100:

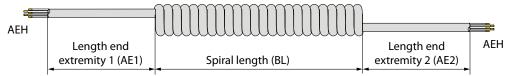
3 wires = brown, white, green

4 wires = brown, white, green, yellow

5 wires = brown, white, green, yellow, grey

6 wires = brown, white, green, yellow, grey, pink

Variable cable ends (see table), including 40, 50, 60, 80, 100 or 200 mm without sheath and equipped with cable lugs (AEH).



ı	ı		'	ı		
Designation	Spiral length	Total cable length	Length end extremity 1 (AE1)	Length end extremity 2 (AE2)	code	Price list
3 wires						
SPK 3x0,5 mm ²	750	3000	200	200	APE-589/314769	29,90€
SPK 3x0,5 mm ²	900	3600	200	200	APE-589/314780	41,20€
SPK 3x0,5 mm ²	900	3600	4000	350	APE-589/314927	48,40 €
SPK 3x0,5 mm ²	750	3000	500	200	APE-589/314931	30,90€
SPK 3x0,5 mm ²	600	2400	500	200	APE-589/314921	26,80€
SPK 3x0,5 mm ²	950	3800	500	200	APE-589/314924	31,90€
4 wires						
SPK 4x0,25 mm ²	750	3000	200	200	APE-589/314851	30,90€
SPK 4x0,25 mm ²	900	3600	1000	400	APE-589/314772	41,20€
SPK 4x0,25 mm ²	1200	4800	4000	400	APE-589/314774	50,50€
SPK 4x0,25 mm ²	900	3600	2000	350	APE-589/315455	45,30€
5 wires						
SPK 5x0,25 mm ²	500	2000	1000	200	APE-589/314767	36,10€
SPK 5x0,25 mm ²	750	3000	200	200	APE-589/314721	34,00€
SPK 5x0,25 mm ² WHITE	750	3000	200	200	APE-589/314876	37,10€
SPK 5x0,25 mm ²	800	3200	1500	200	APE-589/314765	43,30€
SPK 5x0,25 mm ²	900	3600	200	300	APE-589/314745	41,20€
SPK 5x0,25 mm ²	900	3600	2000	350	APE-589/314923	46,40 €
SPK 5x0,25 mm ²	1000	4000	1000	1500	APE-589/314874	51,50€

6 wires						
SPK 6x0,25 mm ²	900	3600	4000	350	APE-589/316978	62,80€



APE-589/315097

"Z"-shaped brackets for spiral cable

€ 8,20

including M16 spiral fixing screws



APE-589/315098

Brackets for spiral cable

€ 8,20

including M16 spiral fixing screws

Crushing force gauge for gates and motorized doors

CERTIFIKO



complian to EN-12453 EN-16005 EN-60335-2-95 DHF TS 011-012 **ASR A1.7**



by the instrument to the BLUE FORCE software. Firmware: upgradeable wirelessly

Battery: rechargeable, lithium-ion





Measures will be automatically sent through GSM. Thanks to GSM interface, it communicates with every device connected to the net without any compatibility problems (pc, tablet, smartphone)

Measurement point storage:

it is possible to assign the reference of the measurement point "in situ," according to the standards

Parameter evaluation according to **EN12453:** with a simple setting, it is possible to obtain the evaluation of measurements according to that standard (passed / failed test)

BlueForce software: free, included with the tool. Guidance on performing force tests according to the standard, visualization of impact curves, management customer/plant data base.



- included always: viewing measurements and graphs on mobile devices
- included 1st year: compiling documentation for compliance and technical file



The KIT contains:

- BLUE FORCE SMART PRO instrument
- Linear extension cable (sizes of 300 and 500mm)
- USB cable for connection to PC (standalone use)
- hexagonal wrench for handle disassembly
- 1 year subscription to the BLUE FORCE CLOUD web portal for wireless use via GSM

TECHINCAL DATA OF BLUE FORCE SMART PRO

- power: not removable battery Li-ION 650mAh - chargeable through USB 5Vcc 500 mA
- local memory capacity: 80 tests
- force acq. interval: 6 sec, 1KHz sampling
- strenght measurement range: 0-2000 N (mechanical stop at about 2100 N)
- strenght measurement resolution: 1 N
- dynamic time measurement resolution: 0.01 sec
- maximum force measurement error: range from 25-400 N: +/- 0.5% F.S. range from 400-1000 N: +/- 1% F.S. range from 1000-2000 N: +/- 2% F.S.
- GPS/GLONASS satellite receiver
- quad band GSM/GPRS modem radio interface: GSM850MHz, EGSM900MHz, DCS1800MHz, PCS1900MHz
- Bluetooth V.3.0 radio interface
- USB interface: V.2.0 specification compliant
- compliance: CE-EMC (TUV Rheinland)
- dimensions: 280x80x50mm (about 1.6kg)







Metal mass detectors Barrier sensors



Activation and presence detector EVOLOOP / A80
Security laser barrier detector LZR-H100 / A82
Metal mass detectors MAGNETIX / A84





Activation and presence detector

EVOLOOP









EVOLOOP is an activation and presence detector for automatic barriers, with integrated microwave technology **MoWa** based on FMCW principles. Is the alternative to induction loops and photocells and it detects motion and static presence.

It has a type D safety certificat.

Thanks to the 140° field of view, you can configure up to 3 virtual loops independently to fit your application.

The loops can be positioned where you desired within this range. For each loop you can decide whether it should function as a presence loop or as a protection loop.

The EVOLOOP detector is particularly resistant in all environments and conditions, including challenging weather like fog, heavy rain, frost or snow.







No more dusty road works with noisy and heavy equipment. Enjoy an installer-friendly, clean and time-saving experience with EVOLOOP. Just mount the sensor, plug it and launch a teach-in. Ready to go!

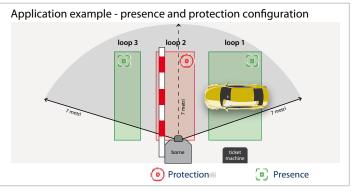


For opening, EVOLOOP is able to IDENTIFY pedestrians from cars



The EVOLOOP is adapted to all applications, whether you need to set up a pay parking system or protect users from a collision with the barrier. It can be installed on all types of barriers, even with a hedge or articulated support.

DETECTION RANGE Field of view



LED INDICATION 1 LED indicating plug status 1 2 LED indicating plug status 2 LED indicating plug status 2 LED indicating plug status 3 or ERROR status 4 LED indicating Bluetooth® status Bluetooth® (only on LED 4)

A 80 www.abexo.tech

Activation and presence detector



<u>Technology</u>: FMCW, MoWa inside (60GHz microwave)

Mounting height: 30 cm to 70 cm

Maximum detection distance: maximum no 7m

Detection types: presence, protection

Radar field of view: 140° opening field and 40° elevation Antenna angle adjustment: from -20° to +20° (without

accessory)

<u>Power supply</u>: 12 - 30V DC +/-10% - 12-24V AC +/-10% <u>Output</u>: 2 electronic relays (galvanic isolation - no polarity)

> Maximum switching voltage: 35 V DC/ 24 V AC > Maximum current switchable: 80 mA (resistive) Power consumption: < 3 W

Led: 3 RGB LEDs and 1 white LED for Bluetooth®

<u>Bluetooth®</u>: operating bandwidth: 2402 MHz - 2480 MHz <u>Material/Colour</u>: PC/ ASA/ Aluminium ADC12 - black

Cable length: 3 m (standard)

<u>Dimensions</u>: 50 mm x 150 mm x 68 mm <u>Protection degree</u>: IP65 (IEC/EN 60529)

Operating temperature: -25°C to +55°C**; 0-95% relative

humidity, non-condensing <u>Standards</u>: EN 12453 (type D)

APPLICATIONS







Access Control

Parking

Pedestrian barriers

INSTALLATION VIA APP

Scan the QR code or open the following link to download the application for mobile devices and install it.







After installation, it will be possible to make the association between the smartphone and the Evoloop detector





Start a simple self-learning process with the mobile application and set up to 3 virtual loops independently to adapt them to your application requirements.



















Metal mass detectors - Barrier sensors/

NEW

Security laser barrier detector

LZR-H100





LZR-H100 detector offers a real alternative to magnetic loops: less time required for installation, detection of all types of vehicles and greater adaptability. The laser sensor for automatic barriers is used to open, protect and/or detect a presence. It offers great flexibility in defining the width and depth of the detection zones.











Comfortable opening

Detection of all types of vehicles: cars, electric vehicles, vehicles made of composite materials, trucks with trailers, etc.

Detection of vehicle trajectory: approaching or moving away.



User safety

LZR-H100 protects vehicles and people within the safety field from contact with the barrier (installation with reference point).



Pedestrian & parallel traffic filter

The barrier only opens when a vehicle is approaching. Pedestrians and parallel traffic in the opening field are screened.



Easy installation

Product installation without any impact on the surrounding environment, with simple delimitation of the detection fields independently from one another, by walking in front of the sensor.



Certified PL «d» / CAT2 EN-ISO13849-1 EN12453



visit our website for more information and complete technical specifications https://bit.ly/2Hucv6i

A 82 www.abexo.tech

Security laser barrier detector



Technology: laser scanner, time-of-flight (ToF) measurement

Maximum detection distance: 9.9 m × 9.9 m

Emission specifications:

IR laser (CLASS 1) = wavelength 905 nm; max. pulse output power 0.10 mW Visible laser (CLASS 2) = wavelength 635 nm; max. CW output power 0.95 mW

Power supply: 10-35 V DC on the detector side

<u>Input: 1 optocoupler (galvanic isolation - non-polarised)</u> <u>Output:</u> 2 electronic relays (galvanic isolation - polarity-free)

<u>Maximum switching voltage</u>: 35V DC / 24V AC <u>Maximum switchable current</u>: 80 mA (resistive)

Power consumption: < 5 W

Response times:

Motion detection: typically 200 ms (adjustable); Presence detection: typically max. 20 ms; max. 80 ms

Vibrations: < 2 G

Material/Colour: PC/ASA/black

<u>Dimensions</u>: 125 mm (W) \times 93 mm (D) \times 70 mm (H) (mounting bracket + 14 mm)

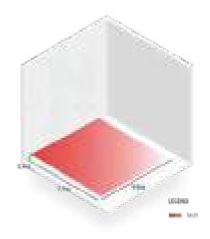
Protection degree: IP65

Operating temperature: -30°C, +60°C under voltage / -10°C, +60°C without voltage Compliance: EMC 2014/30/EU; LVD 2014/35/EU; RoHS 2 2011/65/EU; MD 2006/42/EC

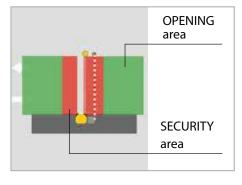
EN 61000-6-2; EN 61000-6-3; EN 60950-1; EN 60825-1; EN 50581;

EN ISO 13849-1 (PI "d" CAT 2); EN 62061 (SIL 2); EN 61496-1 (Type 2); EN 12978; EN

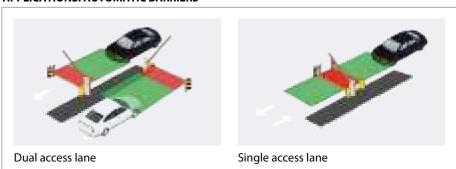
12453 (Device E)



Security device also for AUTOMATIC BOLLARDS areas



APPLICATIONS: AUTOMATIC BARRIERS









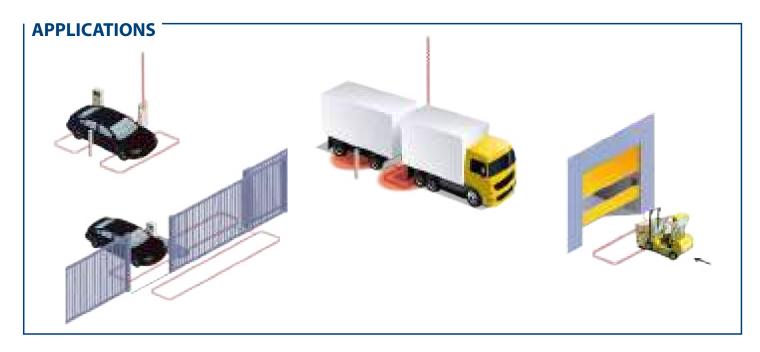


Abex MAGNETIX



MAGNETIX is an electronic metal detector designed to detect the transit or presence of a vehicle on a specific area defined by a magnetic loop laid underground.

The MAGNETIX line is available in the BASIC model with 12/24V single-channel DIN rail mounting and in the DETEC and MATRIX models with Undecall base mounting in single or dual-channel 230V or 24V versions.



MATRIX

Immunity - 4 frequency settings to avoid any interference.

Sensitivity - MATRIX is equipped with ABS function to detect vehicles with raised chassis, tow bars for trailers and forks of forklift trucks.

Directionality - Possibility to determine the direction of the vehicle with the 2-channel version.

Universal - with standard base, MATRIX can be integrated into most control boxes.



MATRIX-S

- · Power supply: 12-24 Vac/Vdc
- · Output: 1 relay output
- · Inductance: from 20 to 1000
- · Sensitivity: 250 stages
- · Response time: 25 ms
- · Temperature: -30°C to +70°C
- · Protection degree: IP40
- · Max. voltage at contacts: 230 Vac
- · Max. current at contacts: 5 A
- · Includes 11-pin socket for DIN rail
- · Dimensions: 77 x 40 x 75 mm

Power supply
12-24 Vac/Vdc
output
1 relay output

APE-590/0034 € 222,50

MATRIX-D



Power supply 12-24 Vac/Vdc output 2 relay outputs

- · Power supply: 12-24 Vac/Vdc
- · Output: 2 relay outputs
- · Inductance: from 20 to 1000
- · Sensitivity: 250 stages
- · Response time: 50 ms
- · Temperature: -30°C to +70°C
- · Protection degree: IP40
- · Max. voltage at contacts: 230 Vac
- · Max. current at contacts: 5 A
- · Includes 11-pin socket for DIN rail
- · Dimensions: 77 x 40 x 75 mm

APE - 590 / 0037 € 341,70

A 84 www.abexo.tech

Loop detector



FEATURES AND BENEFITS

- High sensitivity with the possibility of continuous adjustment
- Different settings of sensitivity in the case of dual-channel
- Setting of continuous presence for an unlimited time
- External temperature compensation to ensure accurate safely detection in case of long-term employment of the loop



Power supply

12-24 Vac/Vdc

channels



BASIC Single Channel

detector 12-24V DIN rail mounting



Power supply: 12-24V ac/dc or 120Vac or 12-24V

Power consumption: 80mA

Inductance of the loop: from 30µH. Ideal: from 80µH to 500µH Wiring the coil: max 100m min 50x 1.5 square meters plot /m

Resistance of the loop: $< 8\Omega$ with power cord Frequency range: 20-80 kHz on 4 levels

Sensitivity range: from 0.01% to 0.65% ($\Delta f/f$) on 4 levels

Output relay: relay OUT1 SP 5 (1) A 250Vac relay OUT2 SP 5 (1) A 250Vac

Type of detection: pulse (100ms) and / or presence for each output

Connections: extractable terminal Report: 1 Red LED + 1 Green LED

Data storage: on EEPROM

Housing: plastic 111x28x92, 5mm

Mounting: DIN - OMEGA guide

Front protection: IPOO **Operating Conditions:**

- ambient temperature: -10°/+50°C

- storage temperature: -20°/+70 °C

Relative humidity: Environment 30/80% noncondensing

Digital Input * OPTIONAL AUX / ALARM ** 2-24Vac/do

* DIGITAL INPUT external reset

** AUX/ALARM the contact is closed in the absence of power supplynd in the fault condition

APE - 550 / 1224

€ 167,70



BASIC-DGL

12-24V detector 2 channels for DIN rack



Technical details like **BASIC**, but more:

- · 10 sensitivity levels
- · Selection of the type of action: just 1 loop / 2 independent loops / with or without direction signal
- · Display of every loop working frequency
- · Stability check of loop frequency to test the loop correct installation
- Dynamic release (patent pending)

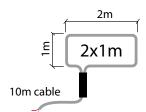
Power supply 12-24 Vac/Vdc channels

APE - 550 / 1230

€ 200,10



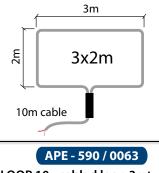




APE - 590 / 0062

LOOP 6 - cabled loop 2mt x 1mt

€ 48,90



LOOP 10 - cabled loop 3mt x 2mt

€ 55,70



Detectors and Sensors for industrial doors

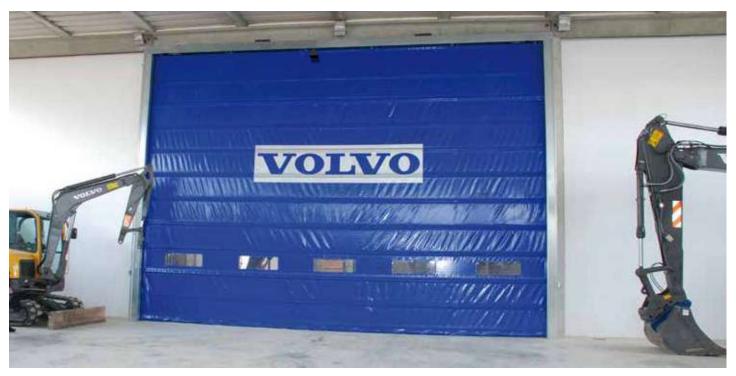


Industrial door sensors (opening) RM620/A88 Industrial door sensors (opening and safety)/A89



Detectors and Sensors for industrial doors/

Sensors for industrial doors (opening)



Unidirectional/bidirectional, X band microwave sensor for industrial door

Planar technology

Signal elaboration with microprocessors



Recognition of the direction of the movement

Programmable functions

High resolution of the covered area

Internal orientation

MICROWAVE technology





TECHNICAL DATA

· Power: 12/24ac/dc

· Absorption: 50 mA max

· Frequency: 9,90 GHz

· Degree of protection: IP66

· Output power: ≤ 14 dBm

· Relay contacts: 1A - 24Vac/dc

· Time relay control: 1-6 sec adjustable

· height of installation: from 3,5 to 6m

· Speed of detection: 0,1 m/s minimum

· Range: 1-10 m Adjustable

· Vertical Direction: 0-60°

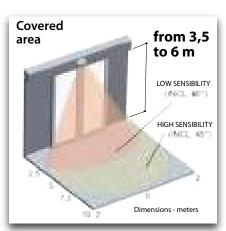
· Horizontal Direction: +/- 45°

· Maximum power consumption: 40mA

· Transmit Power (EIRP): ≤20dBm

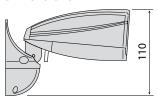
· Operating Temperature: -20°C to +50°C

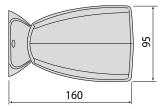
· Dimensions: 160 x 95 x 110 mm





Dimensions





APE - 551 / 0620

Microwave sensor for industrial doors RM620

€ 312,60

A 88 www.abexo.tech

Sensors for industrial doors (opening control only)





FALCON

Functional features: detects and discriminates parallel traffic of pedestrians and vehicles, preventing the door from





Discriminates pedestrians from vehicles regardless of their speed







TECHNICAL DATA

- · Technology: Microwave and microprocessor
- · Transmitter frequency: 24.125 GHz
- · Transmitter power: <20 dBm EIRP
- · Transmitter power density: <5mW/cm2
- · Angle of inclination: from 0° to 180° in elevation
- · Mounting height: 3.5 to 7 m
- Minimum detection speed: 5 cm/s (in the sensor axis)
- · Detection zone (typical): 4 m (W) x 5 m (D) (installation height 5 m)
- · Detection mode: movement
- Supply voltage: 12V to 24V AC +/- 10%, 12V to 24V DC +30% / -10%
- Power consumption: < 2W

- · Output relay: potential-free contact
- · Max. voltage at contacts: 42V AC/DC
- · Max. current at contacts: 1A (resistive)
- · Max. switching power: 30W (DC) / 60 VA (AC)
- Manual adjustment: orientation of detection field (mechanical) / Multiple functions (via buttons)
- ·Temperature range: -30°C to +60°C
- · Product compliance: R&TTE-1999/5/EC, EMC-89/336/EEC
- · Dimensions: 127mm (D) x 102mm (W) x 96mm (H)
- · Housing: black ABS and polycarbonate
- · Aluminium bracket: black anodised
- · Cable length: 10 m

Microwave sensors for doors and gates opening industrial



€ 387,00



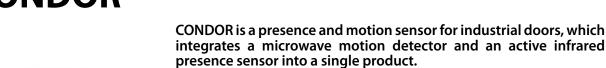




Sensors for industrial doors (opening and security)



CONDOR



Active infrared technology detects any vehicle or object stationary near the door.













The dual technology of microwaves (motion) and active infrared (presence) is an excellent alternative to magnetic loops: door opening and surveillance of the area in front of the door. It filters parallel traffic, pedestrians and any interference and is easy to install.

adjustment/programming options via CRTL and SPOTFINDER remote control

see page A53

TECHNICAL DATA

Mounting height	3,5 - 6 m
Power supply voltage	12V a 24V AC ±10%; 12V a 24V DC +10% / -3%
Mains frequency	50 - 60 Hz
Power consumption	< 3,5 W/VA
Output	n.2 relays with potential-free switching contact
Operating temperature	-30° C, +60°C (0-95% relative humidity, non-condensing)

Technology	Doppler radar Microwave	Active infrared
Detection mode	Movement	Movement and presence
Emitted frequency/ wavelength	24.150 GHz	875 Nm
Power density emitted	< 5 mW/cm ²	< 250 mW/m ²
Detection range	4 x 5 mt	4x4 mt (emission points)*
Minimum detection speed	5 cm/sec	5 cm/sec to activate a detection
Reaction time	100 ms	250 ms
Inclination angle	- 8° / 22° (el. to the front panel)	15° / 45°

EN 62479

Compliant with

regulations



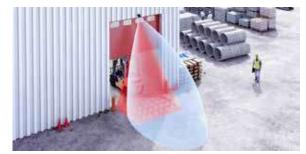
Designed for industrial environments

IP65, robust housing and solution against vibrations and environmental interference.



Reliable and accurate

The planar antenna allows for accurate discrimination between pedestrians and vehicles and does not detect parallel traffic.



Energy saving

Presence detection reduces the use of the door timer, allowing energy savings proportional to the number of opening cycles.

APE - 790 / 28DT
Sensor CONDOR
€ 784,00

A 90 www.abexo.tech

EN 300 440-2 V1.4.1, EN 301 489-1

V1.9.2, EN 301 489-3 V1.6.1, EN 62311,

^{*} area detected with the SPOTFINDER, slightly larger than the detection range





WIDESCAN

Opening, presence and security detector for industrial doors



Laser Technology











7 laser curtains: door opening, surveillance of the area in front of the door, protection people on the threshold. Laser technology filters parallel traffic, ignores pedestrians and is not affected by weather conditions (rain, snow).

- Max. detection range: depending on mounting height (adjustable)
- Mounting height: from 2 to 10 m
- Power supply: 12-24 Vac / 12-24 Vdc
- Dimensions: 200x150x100 mm

APE - 790 / 2108

Sensor WIDESCAN

€ 2.792,00



3D Coverage - Accurately calculates the dimensions, speed and objects direction



Door protection - Accurately detects approaching or parked vehicles to prevent possible contact with the door

IXIO INDUS

Opening and security sensor for industrial automatic doors

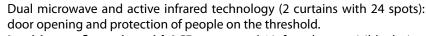
Dual technology









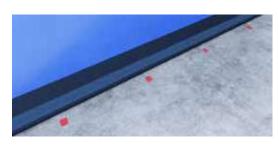


Intuitive configuration with LCD screen and 4 infrared spots visible during configuration to facilitate positioning of the first curtain.



- Max. detection range: 4.5x2.5 m (opening); 3.5x0.5 m (protection)
- Mounting height: from 2 to 4 m
- Power supply: 12-24 Vac / 12-24 Vdc
- Dimensions: 269×57×58 mm

APE - 790 / 0250 Sensor IXIO INDUS € 598,00







Industrial door sensors (opening and safety)

Abex® KABUTO

KABUTO is a dual technology sensor microwave (opening) and infrared (security). These features, combined with the anti-vibration technology, make KABUTO ideal for all installations on industrial doors.

Double technology





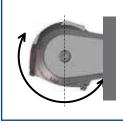




The wide range of installation height (3.5 to 6.5 m) also makes the sensor extremely versatile.

Parallel traffic filtering and detection one-way technology significantly reduce the time to open the door, providing good energy savings.







Thanks to the dual function, it is possible to install the sensor either on the wall or ceiling.



<u>Detection method</u>: motion = microwave (24.15 GHz K band) + active resection = infrared

Installation height: 3.5 m to 6.5 m

Presence timer: 30 s, 1, 2, 5, 10, 20 min, 1, 2 hours or infinite

Power supply: 12-24 Vac/Vdc ±10% (50/60 Hz)

Degree of protection: IP65

Power consumption: 12 Vca = 2,5 VA max / 24 Vca = 3,3 VA max /

12 Vcc = 150 mA max / 24 Vcc = 80 mA max

Output 1: infrared relay Opto (not Pole) Output 2: radar relay Opto (not Pole)

Voltage: 48 Vdc max

Current: 300 mA max (resistive load)

Weight: 1,3 kg

Operating temperature: -20 to +60 °C Dimensions: 230 x 140 x 115 mm





Easy configuration of settings and parameters via remote control (mandatory)



Door detection and opening

Parallel traffic

filter for





APE - 787 / 0250 KABUTO-RC Remote control for **KABUTO** radar € 108,20



Detection and security of objects/people present in the area surrounding





A 92 www.abexo.tech

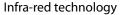
Sensors for industrial doors (opening and security)

HR400-IND

HR400-IND is an activation sensor for industrial automatic doors with static presence detection technology.







Two-zone infrared safety barrier in front of the door protects pedestrians from hazards caused by door movement. The large detection area of 6m x 4m ensures timely detection of fast-approaching vehicles on all types of industrial doors, preventing damage to doors or goods.

Energy efficiency

Unidirectional detection technology reduces building energy consumption by up to 20%. The precisely adjustable detection area minimizes false door activations.







Detection technology: active infrared detection Installation height: from 2 m to 4.7 m

Presence timer: 2 s, 60 s, 10 min, infinite Power supply: 12-24 VAC/VDC ±10% (50/60 Hz)

Protection degree: IP54

Power consumption: 12 Vac = 2.5 VA max / 24 VAC = 2.5 VA max /

12 Vdc = 140 mA max / 24 VDC = 65 mA max

Output 1: infrared Opto relay (non-Pole) Output 2: radar Opto relay (non-Pole)

Installation

from 2 to 4,7 m

Voltage: 48 Vdc max

Current: 300 mA max (resistive load)

Weight: 0.29 kg

Operating temperature: -20 to +60 °C Dimensions: 265 x 61 x 37.5 mm

Accessories available for HR400-IND













Detectors and Sensors for pedestrian doors



Radar sensors for pedestrian doors /A96
Sensors for automatic doors /A98
Infrared safety beam sensor for sliding doors HP1 /A99



Detectors and Sensors for pedestrian doors/

Opening and security sensor for automatic sliding doors



Abex® ORASCAN



ORASCAN system is a safety and opening sensor kit for sliding doors, the first to combine radar and laser technologies.

The *Artek* inside radar system allows doors to be opened comfortably and energy-efficiently, while the '*Time of Fligh*t' laser technology ensures complete safety protection for the door.











Press and Configure: by pressing a single button, ORASCAN detects the door dimensions and automatically positions the laser coverage, regardless of the environment or door type.



A versatile and universal solution: this sensor is suitable for all types and sizes of automatic sliding doors, including large, telescopic, airtight, fire-rated and emergency exit doors, with sensors on both sides for complete control of opening, safety and virtual buttons.



For all types of flooring and weather conditions: laser technology is completely independent of the surrounding environment. The ORASCAN system is compatible with all types of flooring and weather conditions.



Maximum safety: ORASCAN protects the primary edge and threshold of the door across its entire height, width and depth. Contact with the moving door leaves is avoided in all situations. And what about

- Power supply: 12-30 V DC ± 10%
- Power consumption: < 5W
- Mounting height: 2 to 3.5 m.
- <u>- Detection mode</u>: motion (Radar) + presence (Laser)
- Vibrations: < 2G
- Material: PC/ASA
- Protection rating: IP54 (EN 60529)
- Temperature range: -25° C to $+55^{\circ}$ C, humidity: 0-95% non-condensing
- Technology:

Microwave Doppler radar

Transmitter frequency: 24.150 GHz Minimum detection speed: 5 cm/s

Laser Scanner - time-of-flight measurement

Field of view: 180° - Angle of inclination: 0° to -7°

Min. object size: 5 cm at 4 m

- Bluetooth®: operating band 2402 MHz 2480 MHz / Maximum transmitted power: 12 dBm
- Dimensions: 273 mm (W) \times 71 mm (H) \times 67 mm (D)
- Standards: EN-16005; DIN-18650





APE - 790 / 2203

KIT ORASCAN - pair of

indoor / outdoor sensors

€ 3.348,00



MOBILE APP

ORASCAN can be configured and monitored using the easy-to-use mobile app, which connects to the sensor via Bluetooth. Intuitive platform with guided learning procedure and 3D visualisation.

Download on the App Store

Android App on Google play

A 96 www.abexo.tech

Security sensor for swing doors

FLATSCAN SW



FLATSCAN SW uses LASER technology (time-of-flight measurement) and is ideal for swing doors. It generates 170 measurement points to provide complete protection for doors and users.

Easy to install, a single FLATSCAN SW is sufficient to cover the entire width and height of the door leaf, as well as the shear zone, regardless of its dimensions.













Compact design

The FLATSCAN SW can be used on swing doors of any size. Its compact design (8.5 cmx14.2cm) makes it easy to store.



Independent of floor and surrounding environment

Laser technology guarantees stability regardless of the type of floor (wire mesh, absorbent carpet, reflective flooring, slippery surface, etc.). It is also independent of the surrounding environment (handrails, walls, radiators, bins, etc



Cut-off zone protection

FLATSCAN SW covers the area of the door hinge to protect hands and fingers during closing. It has 100 points, distributed over 18° in the cut-off zone.



Rapid and intuitive installation.

The size of the sensor area is defined by the movement of the hand.

The sensor can be adjusted using the **CTRL remote control** (*rif. APE-790/0103*)



- Technology: LASER scanner, time-of-flight measurement
- Maximum detection distance: 4m (diag) with 2% reflectivity (e.g.: at I=1.5m -> max. H=3.7m)
- Opening angle Door protection: 86° / Hinge area: 18°
- Angular resolution Door protection: 1.23° / Hinge area: 0.18°
- Dimensions of detected object: Door protection: 10 cm @ 4m Hinge area: 2 cm @ 4m
- Emission characteristics: Infrared LASER Wavelength 905 nm; max. pulse output 25 W; Class 1
- Power supply / Consumption: 12-24V DC \pm 15% / \leq 2 W
- Response time Door protection: max 50 ms / Hinge area: max 90 ms
- Output: 2 electronic relays (galvanic isolation non-polarised) Maximum switching voltage: 42V AC/DC - Maximum switchable current: 100 mA
- LED indicators 1 two-colour LED: status detection / output
- Dimensions: 142 mm (W) \times 85 mm (H) \times 23 mm (D) (mounting bracket + 7 mm)
- Adjustment angle / Protection rating: +2° to +10° (without mounting bracket) / IP54
- Temperature range / Humidity: -30°C up to +60°C under voltage / 0-95% non-condensing
- Regulations: RoHS 2 2011/65/EU; MD 2006/42/EC; EMC 2014/30/EU; LVD 2014/35/EU EN12978; EN ISO 13849-1PI "d" / CAT2; EN 60529; IEC 60825-1; EN 60950-1; EN 61000-6-2; EN 61000-6-3; IEC 61496-1; EN 61496-3 ESPE Type 2; EN 62061 SIL 2; DIN 18650-1 Chapter 5.7.4 (testbody CA); EN 16005 Chapter 4.6.8 (testbody CA)



FLATSCAN SW DX-SX pair laser detector for doors

€ 1.974,00

APE - 790 / 2010



FLATSCAN SW single SX laser detector for doors

€ 1.067,00

APE - 790 / 2011



FLATSCAN SW single DX laser detector for doors

€ 1.067,00

Accessoires

APE - 790 / 2015



GDA - bracket on glass for FLATSCAN

€ 76,20

APE - 790 / 2016.D RIGHT COVER

APE - 790 / 2016.S LEFT COVER



Protective COVER for FLATSCAN

€ 60,80



Sensors for automatic doors

SSR-3/BL

Dual technology activation and monitored safety sensor With exclusive "Door Learn" technology



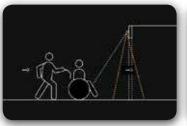


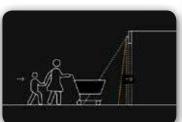




Energy-saving sensor capable of ensuring the activation of pedestrian doors and an unprecedented level of security unprecedented at mounting heights no to 3.2m.

- Technology: microwave + active infrared
- Supply voltage: 12-24 Vdc/Vac ± 10%
- Current consumption: 80 mA (24 VDC)
- Installation height: adjustable 2000-3200mm
- <u>Temperature range</u>: -20°C to +60°C
- Degree of protection: IP54
- <u>Dimensions</u>: 265 x 60 x 43mm







EN16005

EN16005

HOT - SSR - 3/BL

SSR-3 Black color

€ 349,20

accessories available for SSR-3/BL

HOT - WC - IR/BL



Rain cover

€ 109,20

HOT - UTB/BL



Lower mounting bracket

€ 56,70

HOT - HA - 130



Bracket for recessed mounting

€ 58,70

HR100-CT/BL

Advanced unidirectional detection sensor with monitored security system and exclusive "Door Learn" function







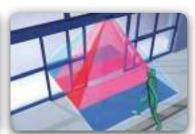


Extraordinary state-of-the-art sensor capable of capable of ensuring the activation of doors pedestrian doors and unprecedented security at mounting heights no to 3m.

- Technology: active infrared reflection
- Supply voltage: 12-24 Vdc/Vac ± 10%
- Current consumption: 60 mA (24 VDC)
- Installation height: adjustable 2000-3000mm
- Temperature range: -20°C to +60°C
- <u>Output</u>: Open collector 7.5mA (Min) load resistor
- Degree of protection: IP54
- <u>Dimensions</u>: 230 x 70 x 44 mm







HOT - HR100 - CT/BL

HR100CT Black color

€ 292,50

accessories available for HR100-CT/BL

HOT - WC - IR/BL



€ 109,20

HOT - UTB/BL



Lower mounting bracket

€ 56,70

HOT - HA - 121



Bracket for recessed mounting

€ 52,50

A 98 www.abexo.tech

Sensors for automatic doors

3H-IR14C/BL

Activation and safety of sliding doors in a compact sensor size, according to EN16005





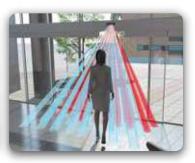


Infrared technology, dual relay output.

- Technology: active infrared resection
- Supply voltage: 12-24 Vdc/Vac ± 10%
- Current consumption: 40 mA (24 VDC)
- Installation height: 3000mm max
- Temperature range: -20°C to +60°C Output: SAFETY = NO relay contact / ACTIVATION = NO relay contact
- Degree of protection: IP54
- Dimensions: 210 x 59 x 28.5 mm







HOT - 3H - IR14C/BL

3H-IR14C Black color

€ 252,40

FN16005

accessories available for 3H-IR14C/BL

HOT - WC - IR/BL



Rain cover

€ 109,20

HOT - UTB/BL



Lower mounting bracket

€ 56,70

HOT - HA - 14



Bracket for recessed mounting

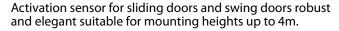
€ 68,00

HR50-UNI/BL

Flexible infrared sensor with directional sensitivity







- Technology: active infrared reflection
- Supply voltage: 12-30 Vdc, 12-24 Vac
- Current consumption: 40 mA (24 VDC)
- Installation height: 4000mm max - Temperature range: -30°C to +55°C
- Output: PhotoMOS (resistance Max. 35)
- Degree of protection: IP54
- Dimensions: 120 x 70 x 41.5 mm





HOT - HR50 - UNI/BL

HR50-UNI Black color

€ 178,20

accessories available for HR50-UNI/BL

HOT - WC - HR50



Rain cover

€ 84,50

HP1

Infrared safety beam sensor for sliding doors





- Operating range of 0,15 m to 10 m
- Single set of safety beam heads
- **Detection Method:** infrared Detection
- Detection Range: 15cm÷10m
- Sensor Dimensions Controller: 43,7mm (L), 114,2mm (A), 29mm (P)
- <u>Sensor Head</u>: 15mm diameter
- Power Supply: 12÷30Vca o Vcc
- Power Consumption Max: Max 1W
- Operating Temperature: -30°C, +55°C



A 99

> Ask our customer service department the best solution for your needs







Non-contact, touch and mechanical door opening buttons

Non-contact buttons / A102 Mechanical buttons PUSH PLATES / A105



Contactless door opening sensors



MAGIC SWITCH CHROMA

Touchless door sensor for automatic doors



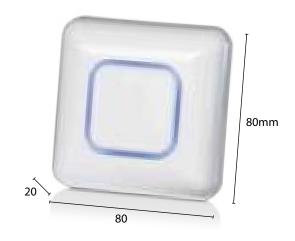


MAGIC SWITCH CHROMA is a contactless opening detector for automatic doors. A hand movement in front of the sensor opens the door automatically.

With a special treatment of the front panel, the MAGIC SWITCH CHROMA is antimicrobial.

For these reasons, it is the ideal sensor for applications where hygiene is essential: hospitals, clean rooms, pharmaceutical industries, hotels and restaurants, airports.

- Technology: microwave
- Mounting: surface mounted
- <u>Supply voltage</u>: 12-24Vac +/-10%; 12-24Vdc +30/-10%
- Power consumption: < 1.5W
- <u>Detection distance</u>: +/- 100-600 mm if movement is towards the sensor at 90° (adjustable)
- Detection method: bidirectional movement
- Temperature range: from -20°C to +55°C
- Output: 1 electronic relay (galvanic isolation non-polarised)
- <u>Protection degree</u>: IP65 (if the front panel and joint are mounted on a smooth surface)
- <u>Material</u>: PMMA / PC. The front panel is treated with a Biomaster silver biocide tested according to ISO 22196:2011
- Emission frequency: 24.150 GHz
- Transmitted power: < 20 dBm EIRP
- <u>Transmitted power density</u>: < 5mW/cm²
- <u>Target speed to create detection</u>: min. 5Hz or +/- 3cm/s, max. 200Hz or +/- 1.2m/s
- Network frequency: 50 to 60 Hz
- Output delay time: 0.5 s (in PULSE mode)
- Recommended wiring cable: stranded cable up to 16 AWG 1.5 mm²
- Dimensions: 80 x 80 x 20 mm

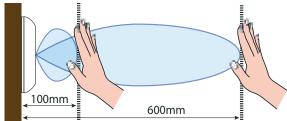


APE - 790 / 0110

Sensor
MAGIC SWITCH CHROMA

€ 275,80

Detection range





Multicolour LED (red, blue, green) adjustable via dip-switch



Contactless and hygienic

The integrated silicone seal makes the product completely airtight, and the antimicrobial front panel limits the spread of germs, bacteria and mould.



Variety of applications

Thanks to its discreet design, high degree of protection (IP65) and contactless opening, the sensor guarantees comfort even for people with disabilities, integrates into any environment and is easy to install and keep clean.

A 102 www.abexo.tech

Non-contact door opening sensor



J-WAVE

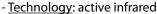
Non-contact door opening sensor infrared

Infrared technology





Slim low-profile design switch with touchless technology that limits germ spread and improves accessibility in healthcare, retail, and commercial environments. Fast reaction time with ability to detect very fast movements in front of the switch. J-Wave is made of a robust polycarbonate material with a constantly illuminated allowing easy detection in dimly lit environments.



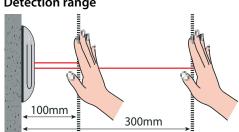
- Supply voltage: 12-30 VDC, 12-24 Vac

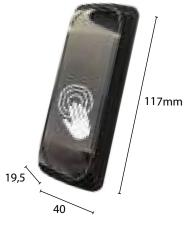
Power consumption: < 1.5W

- Detection distance: 100-300mm ± 30-50mm

- Temperature range: -20°C to +50°C
- Output: Relay contact (1A /30 VDC)
- Degree of protection: IP54
- Dimensions: 40 x 117 x 19,5 mm







HOT-J-WAVE

J-WAVE sensor

€ 143,20







CLEARWAVE

Non-contact door opening sensor microwave

Microwave technology





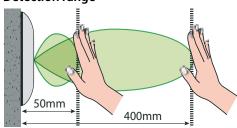
Door activation switch with microwave non-contact designed for situations where hygiene is a factor of primary importance, such as clean rooms, environments used in the processing of food products and chemical industry applications.





- Technology: microwave
- Supply voltage: 12-30 VDC, 12-24 Vac
- Current consumption: 40 mA (24 VDC)
- Detection distance: adjustable 50-400mm ±30-50mm
- Temperature range: -20°C to +60°C
- Output: relay type 1C (one switching contact)
- Degree of protection: P55
- <u>Dimensions</u>: 85,9 x 85,9 x 20 mm

Detection range



HOT-CLEARWAVE

CLEARWAVE Sensor

€ 167,90



Non-contact door opening buttons

AER WAVE

Infrared and wireless botton for door opening without contact

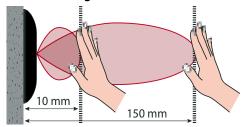
- Technology: infrared and wireless
- Target: hand and/or object*

 (* the detection distance varies with the objects's colour)
- Response time: <1 sec
- Wireless transmission distance: max 10m (with receiver WR-24)
- Dimensions: 95 (A) x 95 (L) x 20 (P) mm
- Protection degree: IP65
- Power supply: n.2 batteries CR123A (included)
- Absorption: <0,5 mW/H
- Operating temperature: -20°C, +50°C





Detection range *



For wireless installation combine with receiver WR-24 (sold separately)



It is possible to register up to 10 AER WAVE buttons on a single WR-24 receiver

HOT - WR - 24

Receiver WR-24

€ 131,80

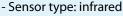
HOT - AERWAVE

Infrared and wireless botton

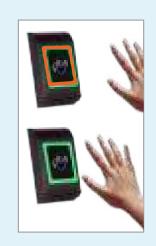
€ 416,10

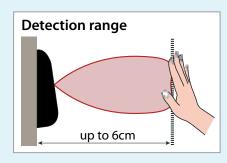
MTT-IR

Non-contact capacitive infrared button



- Surface mounting
- Black ABS material
- Sensing range adjustment: via dipswicth (max 6cm)
- Power supply 12/24 Vdc Vac
- Light signaling (red/green/orange)
- Sound signaling (Buzzer settable with dipswitch)
- Anti-sabotage protection (Tamper)
- One relay output 1A at 24Vdc
- Relay operation: bistable mode or impulsive
- Free LED: programmable via dipswitch (auto) or external
- IP65 degree of protection
- Operating temperature: -20°C to +50°C
- Dimensions: 92x51x27 mm







XPR - MTTBK-IR

Non-contact button

€ 96,80

A 104 www.abexo.tech

Touch and mechanical door opening buttons



MTT

Capacitive touch button

- Surface mounting
- Black ABS material
- Backlighting (red/green for signaling consent)
- Sound signal at each touch
- One relay output 2A
- Power supply 12/24 V dc 15/24 V ac
- Can be used as an opening, lighting and general start button
- Programmable impulsive timed or bistable output
- IP65 degree of protection
- Intuitive due to luminous signaling (also at night)
- Dimensions: 92x51x27mm



XPR - MTTBK
Touch botton

€ 95,80

PUSH PLATES

Opening with a simple push for every type of automatic door

- Made of stainless steel with anti-scratch treatment
- Water-resistant
- Dimensions of rectangular version: 120 (H) x 38 (W) x 40 (D) mm
- Dimensions of square version: 120 (H) x 120 (W) x 40 (D) mm
- Degree of protection: IP52
- Output contacts: dry (NO, NC, COM)
- Contact voltage: 42 Vac max
- Contact current: 0.5A max
- Operating temperature: -30°C, +55°C





For other shapes and models ask customer service







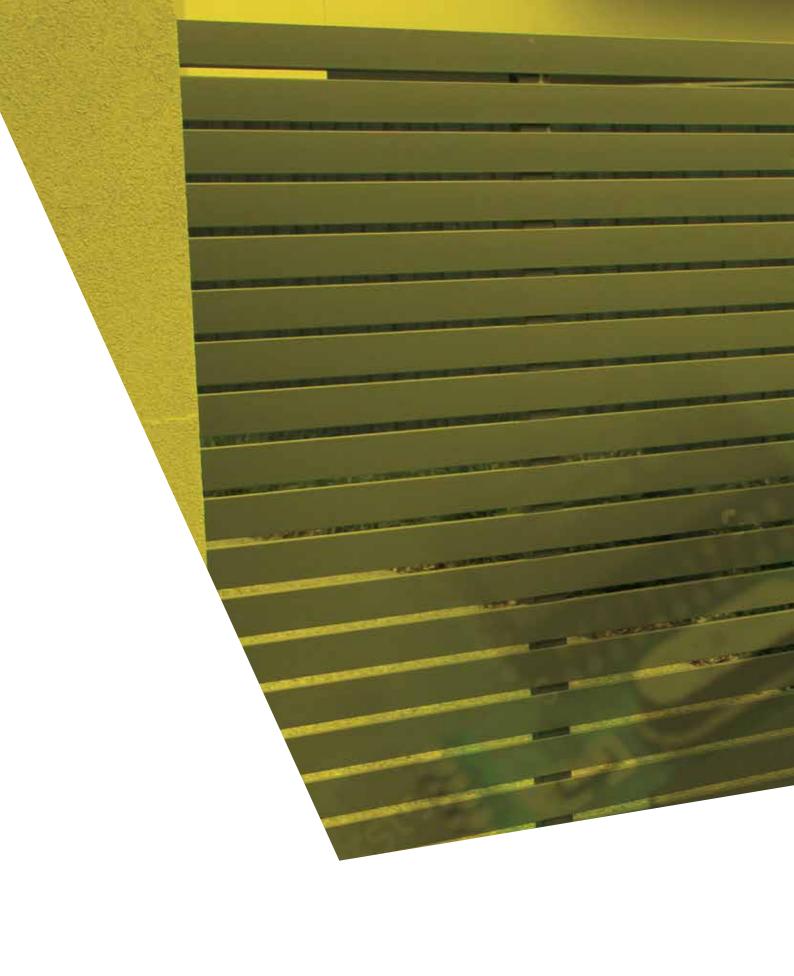
APE - 790 / 0119

PUSH TO OPEN - PBS

€ 132,90



APE - 790 / 0119H
PUSH TO OPEN - PBSH
ask the customer service



Universal control units



Control unit and accessories for motorized rolling shutters SH230/A108
Central unit with remote control-controlled electric brake SH230POWER/A109
Control unit for motorized rolling shutters with integrated courtesy light SH230LUX/A110
Control unit compatible with 230V elettromechanical and hydraulic engines 051D/A112
Central control unit for sliding gates K82/A114
Three-phase 230Vac control unit with inverter for high-speed doors TWISTER/A115
Three-phase control unit with display T400/A116





Control unit and accessories for motorized rolling shutters



SH230



SH230 is an electronic control unit with an **integrated receiver** compatible with all the 433 Mhz fixed codes and some 433 Mhz rolling codes (*). It is easy to install and to program: it has **TWO inputs for command devices** and 2 safety inputs (1 with normally closed contact and one for safety edges $8,3 \text{ k}\Omega$).

SH230 can be programmed in **4 different operating modes** and it is possible to set the pause and working time. The front part of the box is ready to be used as a control panel thanks to the optional board; this board will activate the capacitive external buttons when glued in the internal part.

Technical data:

- Power supply: 230 Vac 50hz +/-10%
- Motor power: 1350W
- Working time: adjustable, max 2,5 minutes
- Automatic closing time: adjustable, max 3 minutes
- Safety edges input: 8k2 ohm or NC contact
- Code combinations: 72 million
- Radio code programming: self-learning
- Frequency: 433,92 Mhz
- Sensibility: greater than -100dbm
- Antenna: integrated
- Operating temperature: -10°C, +70°C



PHOTOCELLS More information from page A60







A 108 www.abexo.tech

Central unit with remote control-controlled electric brake for motorized rolling shutters

MADE IN IT ALY



SH230POWER

SH230POWER is an electronic control equipment with integrated receiver compatible with all 433 Mhz fixed codes and some 433 Mhz* rolling codes.

Its special feature is the ability to be able to drive and unlock the electric brake of shutter motors even in case





Technical Characteristics:

- Power supply: 230 Vac 50 +/-10%
- Motor power: 750 W
- Operating time: programmable max 2,5 minutes
- Automatic closing time: programmable max 3
- Electrobrake release via radio fixed 60 seconds
- Safety edge input 8K2 or flush NC
- Code combinations: 72 million codes
- Radio code programming: self-learning
- Frequency: 433.92Mhz
- Sensitivity: greater than -100dbm
- Reception range: standard 50m (10m man present)
- Antenna: built-in
- Battery: 12V 1.2Ah (included)
- Dimensions: 145x195hx50mm
- Operating temperature: 0°C, +70°C





SH230POWER - Central unit for motorized rolling shutters

€ 148,50

APE - 528 / 3040



SH4 - 4-channel transmitter channels frequency 433.92 MHz for SH line

€ 32,40

(*) See instructions for compatible models



Universal control units/ **Control unit for motorized rolling shutters**

with integrated courtesy light



SH230LUX



The box can be customized with your logo. Moq 50pcs

Its semi-transparent box allow to use SH230LUX as an applique. Thanks to a special setting of the DIP-SWITCH, it is possi-

ble to switch on the light without opening the shutter.

Technical data:

- Power supply: 230Vac +/-10% - Motor power: 1350W (1HP)
- Working time: adjustable from 0,5 min to 2 minutes.
- Pause time: adjustable to 3 minutes max.
- Courtesy light time: adjustable to 3 minutes max.
- Safety edge input: 8k2 ohm or NC contact
- Courtesy light output: 12 V
- Flashing light output: 12 V
- Codes combination: 72 millions
- Storable transmitters: 25
- Transmitters programming mode: self-learning
- Frequency: 433.92 Mhz
- Sensitivity: > 100dbm
- Antenna: integrated
- Operating temperature: -10°C, +70°C
- Application: standard 50 mt dead man 10 mt





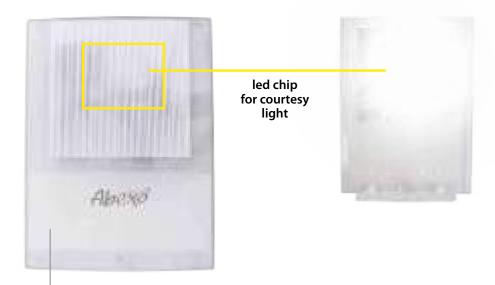




A 110 www.abexo.tech

Control unit for motorized rolling shutters with integrated courtesy light





Thanks to the semi-transparent box you can use the SH230LUX control unit as an applique (wall lamp)



Check out the compatible transmitters



STOP

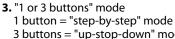
↓ DOWN

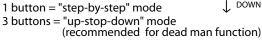
Radio module 433,92 MHz

Led chip 6 leds courtesy light



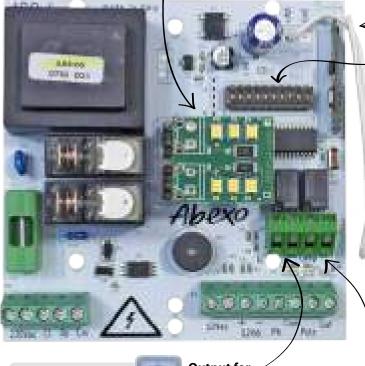
- 1. automatic closure
- 2. pause time set up (max 180 sec.) opening/closing time set up (max 150 sec.) courtesy light time set up (max 180 sec.)







- 5/6. activate/deactivate photocell and wired or 8k2 safety edge
- 7. n.2 8k2 safety edges connected in series / n.1 8k2 safety edge
- 8. codes memory capacity (24 hcs tx with key / 44 tx different codes)
- 9. courtesy light without shutter opening control
- 10. courtesy light timing set up (max 180 sec.)



APE - 550 / 1036.W **ALF6W**



Output for courtesy light

Output for flashing light

APE - 550 / 1034 **ALF6BT**





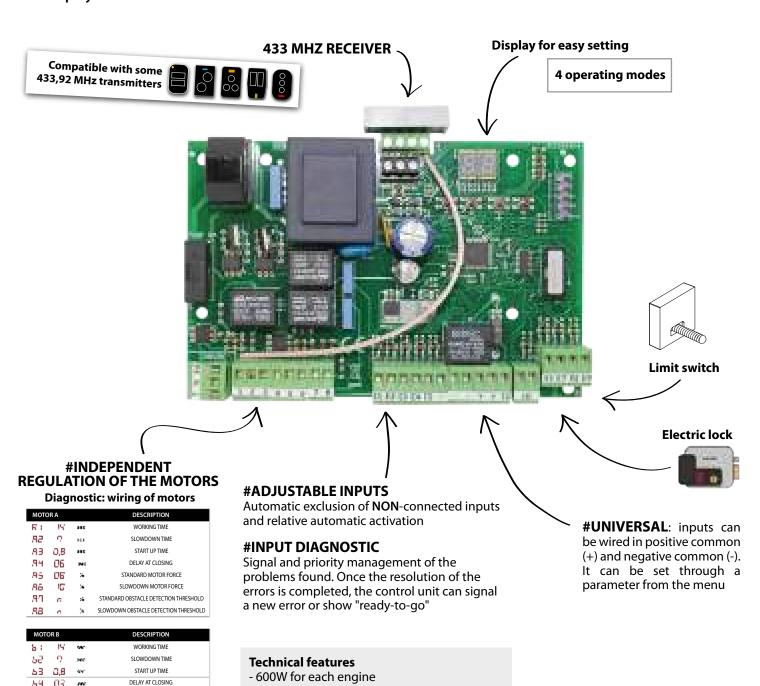
Universal control units/

Control unit compatible with 230V elettromechanical and hydraulic engines



051D is a universal control unit with an integrated universal 433 Mhz receiver (reads and stores all the 433 Mhz fixed codes and some 433 Mhz rolling codes). In order to be universal with all the motors, the 051D control unit allow to adjust the electronic force and the electronic anti-crush system. These parameters can be adjusted for each motor and also differentely for the slowing movement.

The inputs can be set as positive or negative (common). The PRIORITY DIAGNOSTIC integrated function will simplify installation and maintenance: through the display is possible to see the error messages according to priority, guiding the user step by step through the solution of every problem, showing the single error codes on the display one at a time.



- Flashing lamp max 60W 230Vac

- Board dimensions 166x120x36 mm

- Board power supply 230Vac

- Accessories power supply 24Vdc max 250mA

www.abexo.tech A 112

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STANDARD MOTOR FORCE

SLOWDOWN MOTOR FORCE

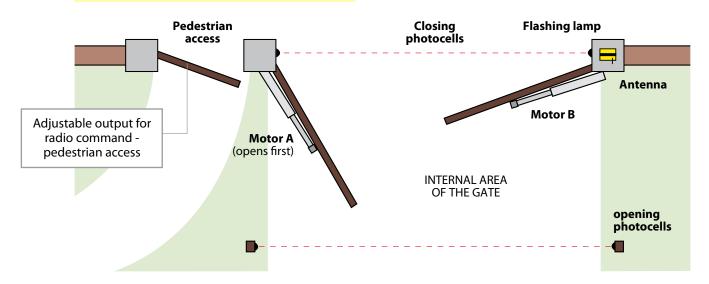
STANDARD ORSTACLE DETECTION THRESHOLD

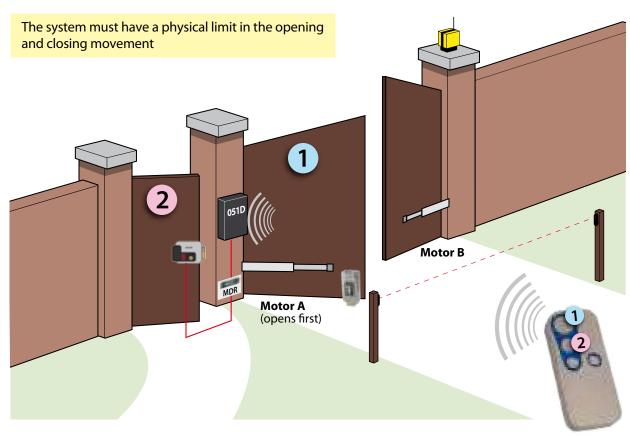
SLOWDOWN OBSTACLE DETECTION THRESHOLD

Control unit compatible with 230V elettromechanical and hydraulic engines



TYPICAL SWING GATE INSTALLATION













Universal control units/

Central control unit for sliding gates

MADE IN IT ALY

K82

The **K82** control unit enables the retrofitting of existing sliding gate automations also using the 8K2 Safety Edges for both opening and closing inputs (up to 3+3).

The high functions that improve the operation of old control units are soft start, slowdown electronic and brake.

2 optional outputs enrich the possibilities.



Main functions

- Fault signals via LEDs
- Adjustment of motor force in normal running
- Adjustment of pause time (automatic closing)
- Photocell test
- Motor testing
- Self-learning of radio codes with start function
- Self-learning of radio codes with stop function
- Self-learning of radio codes with function of pedestrian
- Radio code self-learning with function of quick closing
- Intelligent multifunctional inputs

- Connection of no.3 8K2 safety edges in opening
- Connection of no.3 8K2 safety edges in closing
- Pedestrian opening
- Soft-start
- End-of-stroke slowdown
- Electronic motor brake
- No.2 optional auxiliary outputs

Technical Characteristics:

- Power supply: 230Vac
- Max managed motor power: 1000W
- Accessory power supply: 24Vdc 200mA
- Flasher output: 24Vac, 5 Watts
- 230Vac independent fixed output (flasher)
- Frequency: 433.92Mhz
- Storable radio codes: 100
- Dimensions: 137x78x33mm
- Operating temperature: -10°C, +70°C

4 LOGICS OF OPERATION

automatic, condominial, step-by-step, step-by-step with automatic closing

APE - 570 / 0740



K82 Central control unit for sliding gates

€ 159,70

APE - 570 / 0022



MDR Optional board for additional outputs 4.6x1.7cm

€ 20,00

APE - 570 / 0023



K82 RR 433.92 MHz radio module for K82 control unit

€ 20,60

A 114 www.abexo.tech

Three-phase 230Vac control unit with inverter for high-speed doors

TWISTER







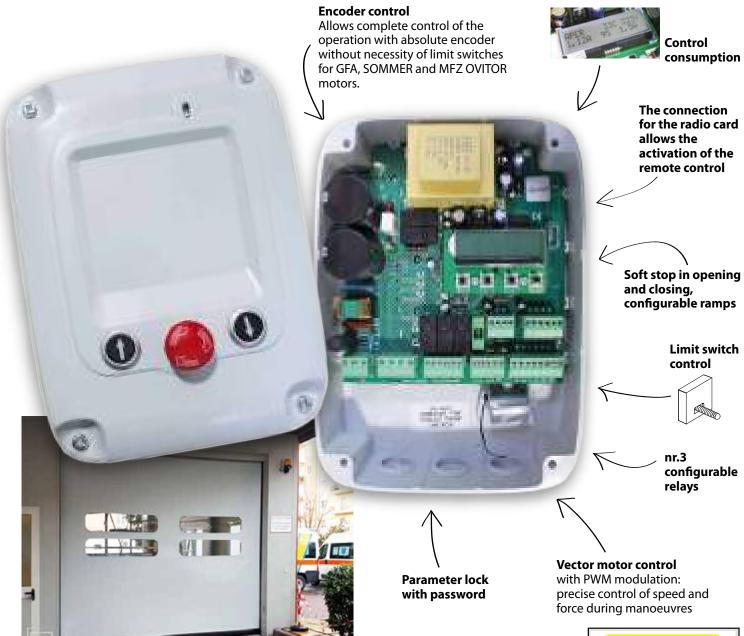




The TWISTER control unit is designed to be part of an automation system for high-speed, overhead, up-and-over or sliding doors with a 230Vac three-phase motor with independent speed and force control from a 230V single-phase power supply.

The control unit is equipped with an LCD screen and a keypad that allows parameters to be adjusted easily and effectively.

Its powerful hardware and versatile settings allow it to adapt universally to any installation.



Technical Specifications:

- Power supply: 230Vac
- Maximum motor power managed: 2HP / 1.5KW
- Accessory power supplies: 24VAC 12W / 15VDC 3 5W
- Inputs: 8 opto-isolators + 2 analogue
- Plug-in cards: radio module

- External power supply protection: resettable fuse
- Protection degree: IP54 (IP65 with cable glands)
- Display: LCD 2x16 characters backlit
- Dimensions: 196x280x90 mm
- Operating temperature: -20°C, +70°C





€ 988,80



Three-phase control unit with display

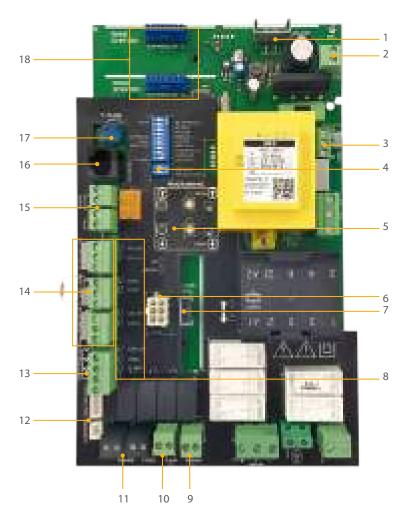
T400





T400 three-phase control unit is an advanced control system for the automation of large industrial gates and doors. It manages motors at both 230V and 400V, providing flexibility and adaptability to different power requirements. Programming is intuitive with integrated buttons, while advanced connectivity includes a connector for digital limit switches.

Precise adjustment of operating modes and integrated diagnostics simplify use and maintenance. Multiple outputs for accessories and customisable software complete the features of this robust and adaptable control unit, compatible with all three-phase motors.





- 1. Plug-in receiver connector (STICK/RACK)
- 2. 24 Vac connection
- 3. 230/400V selector
- 4. 9-position option selector
- 5. Programming buttons on panel
- 6. Encoder: compatible with ELEKTROMATEN and KOSTAL
- 7. Vehicle detector connector
- 8. LED indicator lights for active inputs/outputs
- 9. 230V motor brake
- 10. 230V flashing light
- 11. Excluded function: door open/door closed
- 12. Buttons on cover
- 13. 3-button input: OPEN LOCK CLOSE
- 14. 6 inputs with configurable
- 15. 24V DC connection
- 16. Connector for function and analysis programmer (VERSUSProg)
- 17. Auto close time regulator
- 18. 2 connectors for function expansion card



TECHNICAL SPECIFICATIONS

- Three-phase control unit for industrial doors
- Power supply/max. motor power from 230V/1.2Kw and 400V/2.2Kw
- Active input/output indicator
- LED ERROR status indicator
- Detection of operating errors
- Independent 24 Vac and 24 Vdc outputs, max. 700 mA
- "Easy to program": programming buttons on the control panel



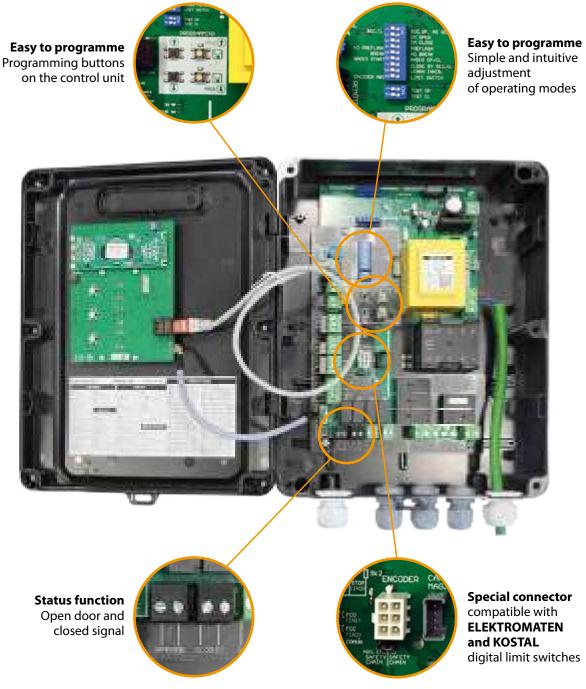
Removable V cable glands

To facilitate installation/replacement of pre-wired accessories

Three-phase control unit with display



The T400 three-phase control unit satisfies the requirements that characterise the range, with functions and finishes that can be adapted to customer needs.

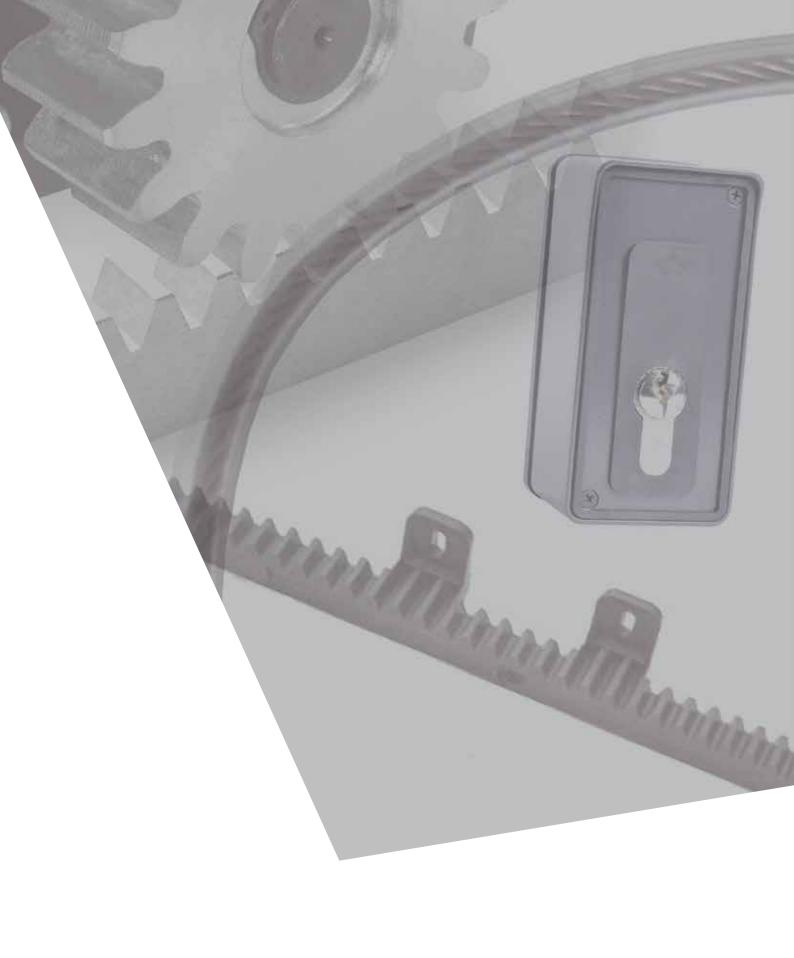












Manual Barrier and containers



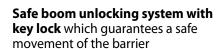
Manual barrier MOVEO/A120
Passage restriction columns and accessories POLY/A122
Series of stainless steel cases for electronic control units BOXX/A124
Plastic box for control units PBOX/A125

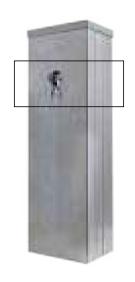














Thanks to the internal linkage mechanism, the movement of the rod is always balanced with the possibility of locking in the closed or fully open position.







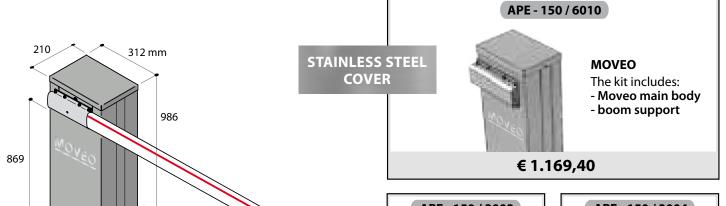


A 120 www.abexo.tech

Manual barrier







Boom dimensions

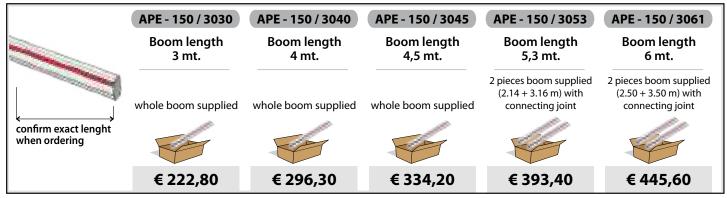
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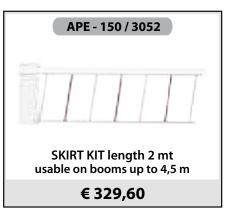


BOOM



ACCESSORIES







www.abexo.tech A 121



Passage restriction columns and accessories





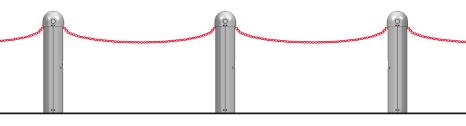
POLY-MOCK

POLY fixed column (without automation)

Street furniture object useful to border zones.

This item can be combined with the POLY automatic chain barrier and the SERVICE PLUS column.





POLY-PLUS

Upper module for POLY



<u>14</u>3

284

196

800 mm

1553 mm

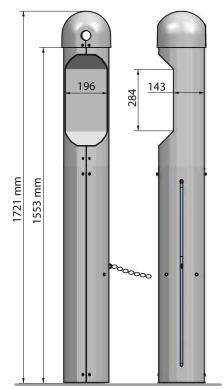
- Module to be installed on top of the POLY-MOCK, designated for housing accessories (e.g. intercom) or controls (e.g. keypads).
- Neutral fixing plate for floor (included)
- Module height: 800 mm.



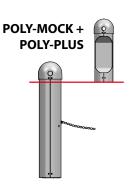
SERVICE PLUS

The result of combining the POLY-PLUS module with the fixed POLY-MOCK column, the SERVICE-PLUS represents an integrated automation solution, exclusive in this field.

It allows the application of command and control accessories (entry-phones, cameras, card readers and codes, etc..) without the need for alternative housings and non-integrated.







APE - 150 / 8050

SERVICE PLUS

€ 1.276,20

A 122 www.abexo.tech







AUTOMATIC CHAIN BARRIER

The POLY barrier is a versatile and secure system for controlling access to private or business areas. It consists of one or two columns (depending on the model) and a chain, which is moved by a gearmotor and is raised or lowered to allow or block the access.

- > COURTESY LIGHT to illuminate
- > INTEGRATED FLASHING LIGHT
 during chain movement
 > MOTOR WITH 24VDC ENCODER
 for immediate stop in obstruction





Robust and durable: made of high-quality materials to ensure a long service life.

Safe: equipped with safety systems to prevent accidents, such as presence sensors and limit switches.

Versatile: available in different configurations to adapt to different space and usage requirements.

Easy to install: the system is designed for easy installation and maintenance.

Customisable: it is possible to add accessories such as flashing lights, photocells and remote controls to customise the system.







https://bit.ly/3HKYoJ3

download **POLY** catalogue

www.abexo.tech

Manual barrier and containers/

Series of stainless steel cases for electronic control units





The BOXX containers for control units, with a modern and compact design, include a range of versions manufactured entirely in stainless steel and adaptable to any need.

WALL APPLICATION



POLE APPLICATION



FLOOR APPLICATION



A 124 www.abexo.tech

Series of stainless steel cases for electronic control units





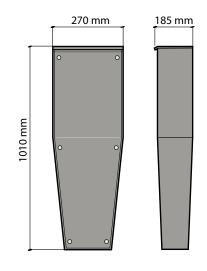


The extra-large BOXX version has been built to posses the maximum contenitive capacity, so that it could hold switches, electric devices and central units.

Techincal characteristics:

- Structure material: stainless steel

APE - 150 / 5045 BOXX-XL € 350,00





PBOX





Universal box.

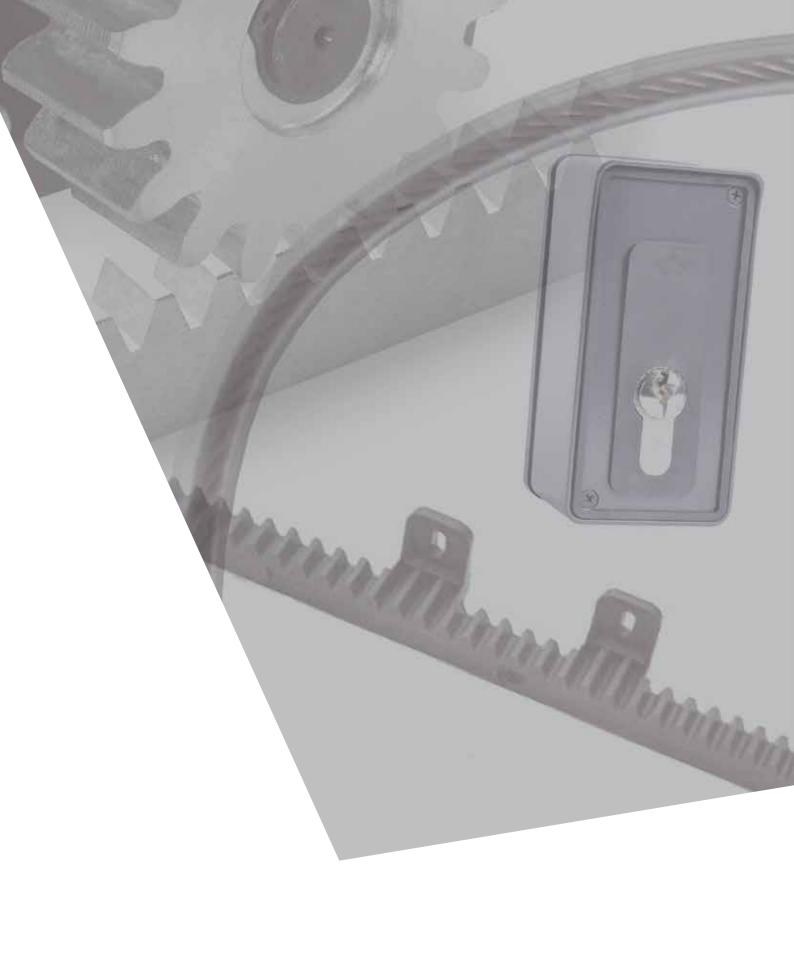
Large box, in plastic material, for control units housing. Including slot for padlock.





APE - 567 / 0010 PBOX € 30,00

www.abexo.tech A 125







Universal aluminum columns DORICA / A128
Racks and attachments / A130
Protection module UNI-SAVE / A131
"Parachute" brakes for sloping sliding gates CONTROLGIR / A132
Security Box / A133
Key-Switch / A134
Batteries / A135
Power magnets / A136
Electric lock and Fall prevention cable / A137
Power supply / A138



Devices and mechanical accessories/

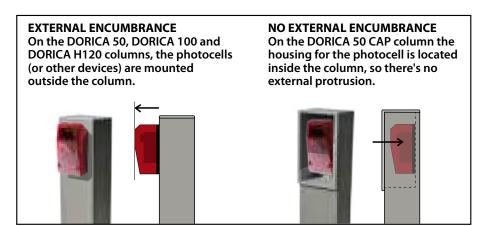
Universal aluminum columns







Aluminium columns series designed to provide a strong, durable and practical product for installing photocells, keypads, etc.



The body column's, being composed of 2 sliding proles, can be opened to facilitate the wiring's cables

EASY TO WIRE

RESISTANCEAs the profile shape is extruded in aluminium, the structure of these columns is very resistant



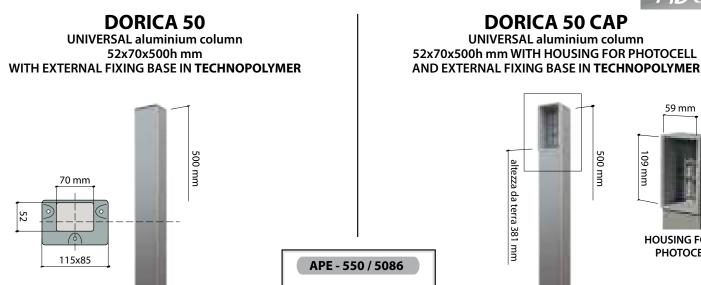


A 128 www.abexo.tech

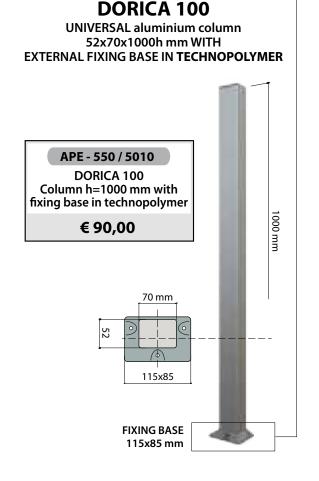
Universal aluminum columns

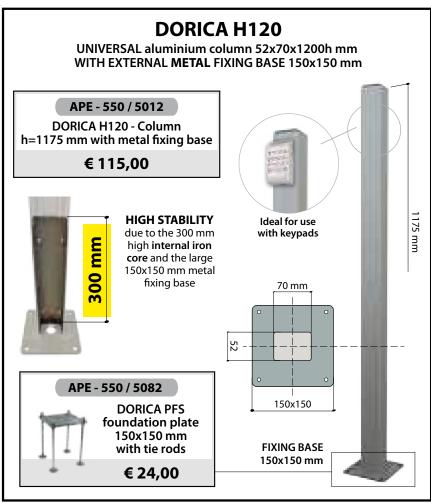


59 mm



HOUSING FOR PHOTOCELL FIXING BASE FIXING BASE 115x85mm 115x85mm **DORICA PFP** APE - 550 / 5061 APE - 550 / 5041 foundation plate **DORICA 50** standard 3 tie rods **DORICA 50 CAP** Column h=500 mm with for BASE IN Column h=500 mm with housing and fixing base in technopolymer fixing base in technopolymer **TECHNOPOLYMER** € 56,70 € 12,50 € 57,70





www.abexo.tech A 129



CRP700

Tecnopolymer rack max 700 Kg (a) for sliding gates



- Single bar lenght 1mt.
- 10 mts pack of tecnopolymer rack
- N.6 fixing elements module 4
- Maximum capacity 700 kg



APE - 511 / 0700 CRP700 rack 700kg € 19,50/mt

CRP1200

Tecnopolymer rack max 1200 Kg (f) for sliding gates



- Single bar lenght 1mt.
- 8 mts pack of tecnopolymer rack
- N.6 fixing elements module 4
- Maximum capacity 1200 kg



APE - 511 / 1200

CRP1200

rack 1200kg

€ 23,80/mt

RACKS FIXING ELEMENTS CRP700 / CRP1200

- Fixing elements:1 pack = 1mt di rack
- Min. quantity purchasable: 10pcs



APE - 511 / 0060 Fixing elements for CRP700 and CRP1000 rack

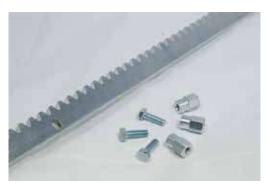
€ 2,00

A 130 www.abexo.tech

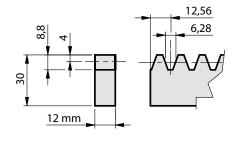


CRM3012

Steel rack for sliding gates



2222222444444



- Single bar lenght 1mt
- 4 mts pack of galvanized steel racks (module 4)
- With bolts and spacers for wall mounting (to be welded)

APE - 555 / 1020

CRM3012 galvanized steel rack (pack 4 mt)

€ 26,00/mt



UNI-SAVE

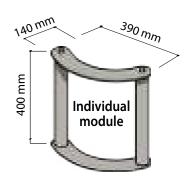
Universal protection module



Round high-strength steel frame with steel columns. Peso 7,5 Kg

configuration: BARRIER-SAVE x3 elements

configuration: POLY-SAVE



It is a universal module for the opening systems protection and more. It is composed of a modular metal structure that can be adapted to different uses, for example to protect the 'POLY' chain lifter (2 elements), on the 'MOVEO' manual barrier (3 elements) or for sliding gates gear motors.

APE - 150 / 8038 Individual UNI-SAVE module

€ 154,50



"Parachute" brakes for sloping sliding gates







The CONTROLGIR line is indispensable for standardization in the presence of sliding gates on a slope (it is necessary for there to be a rack). In case of unlocking of the automation gear motor, the internal hydraulic circuit (adjustable) has the function of

"parachute," that is, to regulate the downward speed throughout the gate's travel. The operating speed should be adjusted just above that of the gearmotor so that it does not interfere with the automation.

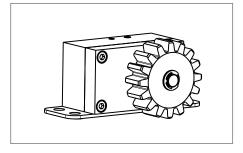
CONTROLGIR-7

Braking system for sloping sliding gates - maximum slope 3,2° (7 Mn)



TECHNICAL DATA

M (required resistant moment): 7 Nm Rack pitch: M4 Gate weight: 400 Kg (3920 N) Slope: 3,2° MAX



Formula:

M[Nm] = Px sin Bx 0,032 $P = gate\ weight\ in\ Newtons\ (9.8N=1Kg)$ sinB = sine of the tilt angle (B = tilt in degrees) $P = 9.8 \times 400 \text{kg} = 3920 \text{ Newton}$ $M = 3920 \text{ Newton } x \sin 3.2 \times 0.032 = 7 \text{ Nm}$

technical data of your installation:

Send us the following

APE - 147 / 4004 Parachute break 3,2° - 7Nm € 399,60

- Gate weight
- B= angle of inclination/slope
- -Module of the rack pitch

We will take care of the calculation!

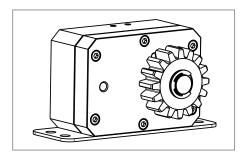
CONTROLGIR-30

Braking system for sloping sliding gates - maximum slope 13,9° (30 Nm)



TECHNICAL DATA

M (required resistant moment): 30 Nm Rack pitch: M4 Gate weight: 400 Kg (3920 N) Slope: 13,9° MAX



Formula:

M[Nm] = Px sin Bx 0,032 $P = gate\ weight\ in\ Newtons\ (9.8N=1Kg)$ sinB = sine of the tilt angle (B = tilt in degrees) $P = 9.8 \times 400 \text{kg} = 3920 \text{ Newton}$ $M = 3920 \text{ Newton } x \sin 13.9 \times 0.032 = 30 \text{ Nm}$

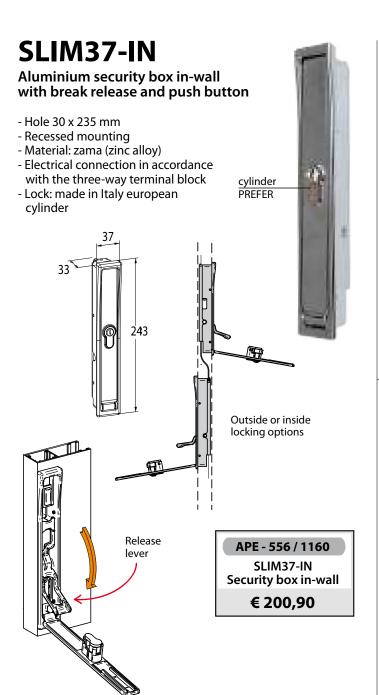
APE - 147 / 4009

Parachute break 13,9° - 30Nm

€ 601,50

www.abexo.tech A 132





SMALL53

Wall-mounted selector switch with break release

- Break release with hexagonal key
- Interchangeable cylinder made in
- Key with European cylinder
- Release lever in the keyfob
- Metal body
- Dimensions: 53x108hx44 mm



APE - 556 / 1155

SMALL53 wall-mounted selector with release

€ 61,80

SMALL53-IN





- Interchangeable cylinder made in Italy
- break release with hexagonal key
- Dimensions: 57x120hx37 mm

APE - 556 / 1154

SMALL53-IN Flush-mounted selector switch with break release

€ 67,00



SMALL59

Aluminium security box with break release and push button

- Wall mounting
- Material: alluminium
- Electrical connection in accordance with the three-way terminal block
- Lock: made in Italy european cylinder





APE - 556 / 1150

SMALL59 **Security box**

€ 59,70



Roller shutter locks and Key-switch



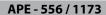
EASY UNLOCK

Internal release for roller shutters and emergency release for automatic doors

EASY UNLOCK is the first release device for the brake specially designed for security inside commercial premises.

In the event of an emergency, it allows to release the motor brake and manually open the shutter in a quickly and intuitive way.

- Connectable to external release device
- Flush-mounted and wall-mounted
- Size: 30x143h x 33 prof cm
- Frame 41 x 158h mm for flush mounting
- Color WHITE RAL 9010



EASY UNLOCK Internal release for roller shutters

€ 53,60



ECO-KEY

Surface-mounted two contacts key-switch



- Start/Stop
- Cylinder PREFER
- Technopolymer
- Degree of protection: IP54
- Operating temperature: -20°C, +55°C
- Switches absorption: 16A
- Dimensions: 75x75x31h mm



APE - 518 / 0030

ECO-KEY Surface-mounted key-switch

€ 30,90



ECO-KEY-IN

Two contacts flush-mounted key-switch



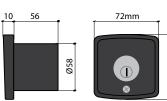
- Start/Stop
- Cylinder PREFER
- Technopolymer
- Degree of protection: IP54
- Operating temperature: -20°C, +55°C
- Switches absorption: 16A



APE - 518 / 0040

ECO-KEY IN Flush-mounted key-switch

€ 37,10



FLAT

Aluminium wall-mounted key-switch

- 2 contacts: 16A

- Dimensions: 79x30x79h mm



APE - 136 / 6015

FLAT - Aluminium wall-mounted key-switch

€ 40,20

www.abexo.tech A 134



CR2032

CR2032 3V battery for EGO64, EGO433, EGO-PLUS transmitter, brand: "Maxell"

minimum pack and its multiples: 25 pcs





APE - 550 / 9501

€ 2,00/cad

BATT3.6V

3.6V Lithium battery for Radioband3

pack: 1 pcs



JCM-3004484

€ 10,60/cad

BATT1.5V

1,5V AA alkaline battery for RadioBand1G and Sensitive safety edges

pack: 1 pcs



JCM - 3002997

€ 4,20/cad

CR₂

3V lithium battery for EGO-KODE brand "Panasonic"

pack: 1 pcs



APE - 550 / 9503

€ 5,50/cad

ALK12V

12V alkaline battery for GP23AE transmitters

minimum pack and its multiples: 50 pcs



APE - 622 / 2401

€ 2,40/cad

CR2450

3V battery for INDUS



APE - 550 / 9505

€ 4,10/cad

www.abexo.tech A 135



Power magnets

4500FS

200 kg power magnet for external mounting IP67















IGEM4500FS

Power magnet 200 kg for outdoor use

€ 214,00

mounting: Universal, surface

load capacity: 200 kgf (*)

power supply: 12/24 Vdc

finish: AISI 304 stainless steel

power consumption: 500/250 mA mounting brackets: None door status monitoring: No use category - rating: 3

dimensions: 164x32x25 mm

protection degree: IP67 weight: 3 kg

TECHNICAL SPECIFICATIONS

- Robust design, high-quality finishes
- Corrosion-proof: Salt Spray Test (ISO 9227, ASTM B 117-90)
- No residual magnetism
- No button required on the armature to unlock the door
- Integrated MOV overvoltage protection
- Maintenance category: Grade 3

(3000N-300kgf) Tolerance 15%

- Usage category: Grade 3 (public high grade)
- Resistance/durability: Grade 9 (> 1,000,000 cycles)
- Corrosion resistance: Grade 3 (EN 1670, EN ISO 9227)
- 10-year warranty

APPLICATIONS

Outdoor power magnets can be used on swing gates for:

gate OPEN

gate CLOSED
as an anti-burglary
device

5000G

750 kg power magnet for external mounting IP67















mounting: Universal, surface

load capacity: 750 kgf (*)

finish: AISI 304 stainless steel

power supply: 12/24 Vdc power consumption: 500/250 mA

mounting brackets: AMZB5000 excluded door status monitoring: Relay contact (REED)

use category - rating: 6+

dimensions: 224x63,5x45 mm

protection degree: IP67 weight: 5 kg



IGEM5000G

Power magnet 750 kg for outdoor use

€ 508,00

TECHNICAL FEATURES

- Robust design, high-quality finishes
- Corrosion-proof: Salt Spray Test (ISO 9227, ASTM B 117-90)
- No residual magnetism
- No button required on the armature to unlock the door
- Integrated MOV overvoltage protection
- Holding category: Grade 3 (3000N -300kgf) Tolerance 15%
- Usage category: Grade 3 (public high level)
- Strength/durability: Grade 9 (> 1,000,000 cycles)
- Corrosion resistance: Grade 3 (EN 1670, EN ISO 9227)
- 10-vear warranty
- Maintenance category: Grade 6+ (7500N - 750kgf) Tolérance 15%

www.abexo.tech A 136

Electric lock and Fall prevention cable



ELV

Vertical 12V electric lock with ground latch

- Release mechanism 17Vdc (12Vac)
- Release lock and n.2 fixing screws
- Catch plate
- N. 3 keys
- Metal body
- Body dimensions: 66x35x122h mm



APE - 518 / 5001

ELV Vertical electric lock

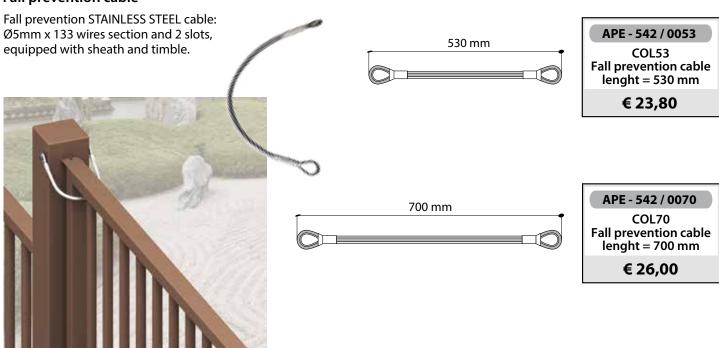
€ 133,90

APPLICATIONS

The ELV electric lock is ideal for use as an electric lock and release mechanism for swing gates, with the locking plate fixed to the floor.

COL

Fall prevention cable



www.abexo.tech



PS24

Power supply 24V - 0,5A - 12W





Handiness

- Designed for 3 modules flush mounting box housing
- Status LED for output signal
- Connection with screw terminals

ErP 2009-125-CE Directive

EN 60950-1; EN 61000-4-2; EN 61000-4-4

APE - 143 / 0024

Power supply PS24

€ 33,20

Efficacy and protection

- Stabilized output
- Adjustable output voltage
- Switching technology
- Extended range 100:240 operation
- Electronic protection against overcurrent and/or short circuit
- Grills for internal components ventilation

TECHNICAL DATA

Input voltage: 100-240 Vac Output voltage: 24 Vdc

Current c/rated output: 0,25-0,13 A

Ouput current: 0,5 Å

Dimensions: 56 x 32,5 x 56 mm

Weight: 0,06 kg

Operating temperature: -20°C, +60°C

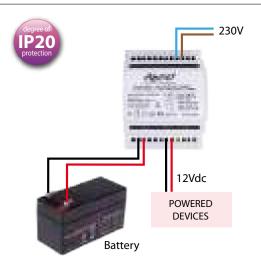
Application examples:

- Home automation
- Cameras
- Sensors
- Constant voltage LED
- Electronic circuits

PSB12V24W

Power supply 12V - 2A - 24W





APE - 143 / 1224W

PSB12V24W Power supply DIN RAIL Bar - 230/12V

€ 92,00

TECHNICAL DATA

Input voltage: 100÷240 Vac Output voltage: 12÷14 Vdc

Current c/rated output: 0,45÷0,35 A Ouput current: 2 A (0,7 A battery) Dimensions: 70 x 90 x 66 mm

Weight: 0,35 Kg

Operating temperature: -20°C, +60°C

PS24V25W

Power supply 24V - 1A - 25W





APE - 143 / 0025

PS24V25W Power supply DIN RAIL Bar - 230/24V

€ 45,00

TECHNICAL DATA

Input voltage: 100÷240 Vac Output voltage: 24 Vdc

Current c/rated output: 0,6÷0,3 A

Ouput current: 1 A

Dimensions: 35,5 x 90 x 66 mm

Weight: 0,17 Kg

Operating temperature: -20°C, +70°C

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AB tecno - Terms of Sale



1. Effectiveness of these general conditions of sale

These General Conditions of Sale apply to all orders relating to products with the Abexo brand, addressed to Ab Tecno srl (hereafter: Ab Tecno srl). For distributed brands, the sales conditions of the manufacturer are valid, if present. All sales from Ab Tecno to Customers (hereafter: Customer) are governed by the following General Conditions of Sale, which are an integral part of the sales contract and replace and cancel any contrary special clause or agreement in the order or in another document from the Customer.

2. Orders

All orders are "subject to availability and change of price lists". Ab Tecno reserves the right to accept or refuse, in whole or in part, the orders of the Customer in reason of their conformity or not with the present general conditions and the availability of the requested products. Ab Tecno reserves the right to make at any time technical changes to the products in the price list, without this generating any claim by the Customer.

Orders can not be canceled in whole or in part by the Customer after 5 days from their transmission to Ab Tecno srl; in case of cancellation after this term, Ab Tecno srl will be entitled to the entire indemnity.

3. Prices

The products are sold by Ab Tecno to the customer at the Ab Tecno srl price list in force at the time of delivery. The Customer undertakes to accept without reserve the eventual variations of the list intervened between the order and the delivery of the product.

Each new Ab Tecno price list cancels and replaces the previous ones. Ab Tecno srl list prices are always intended ex-works, excluding VAT.

4. Terms of delivery

- All products are delivered ex-works, Ab Tecno warehouse.
- Unless otherwise agreed in writing with Ab Tecno, the delivery terms are 30 working days from the order accepted by Ab Tecno.
- Any delay not exceeding the tolerances of use will not entitle the Customer to request the termination, even partial, of the contract, to refuse the delivery of products or request compensation for damages.
- The obligation to deliver the goods is fulfilled with delivery to the carrier.
- Ab Tecno is freed from the obligation to deliver the goods in all cases of fortuitous event or force majeure, strikes or the impossibility of procurement of raw materials or other unavailability of products, and in any case when events occur that prevent delivery of the goods without fault of Ab Tecno srl.

5. Shipments

- Shipments will be made by courier agreement with Ab Tecno, which will automatically charge the relative amount on the invoice. When ordering it will be possible to agree with Ab Tecno the use of a different courier, always at the expense of the Customer, or the direct collection of the goods, ex factory Ab Tecno srl.
- The goods always travel at the total risk and danger of the customer. Possible thefts, losses, deterioration or missing goods don't exonerate the customer from the obligation to pay the price, if the goods have been regularly delivered from Ab Tecno factory to the carrier.
- The goods are not covered by insurance policy, unless expressly requested by the customer, and at his own expense and risk.

6. Collection of products

The Customer undertakes to collect the goods as soon as they have been made available to them. In case of delay, Ab Tecno will be entitled - in addition to the integral payment of the price - the reimbursement of storage or rest and storage costs of the goods, except for compensation for damages. Ab Tecno does not answer of the damages that, directly or indirectly, derive from the stock of the goods not withdrawn or withdrawn late, both in Ab Tecno warehouses that in those of freight forwarders or transporters or others.

7. Warranty

- All the equipment on the price list are carefully checked and tested: Ab Tecno guarantees its products, under the Ab Tecno srl trademark or any other brand, against the defects of the material used or the manufacture according to the conditions and limits of installation and use indicated by Ab Tecno.
- The duration of the quarantee is:
- 1) 24 months from the date of manufacture affixed to each Ab Tecno brand product.
- 2) The warranty includes only the repair or replacement of the product considered defective according to Ab Tecno: it remains excluded from the warranty any other damage or expense of any nature incurred by the customer. All replaced products will remain the Ab Tecno property anyway. Ab Tecno assumes no responsibility for problems arising from incorrect installation of the products. It is always indispensable that the person carrying out the installation complies with the safety regulations in force and has the necessary technical knowledge and capacity to perform the installation properly.

Ab Tecno assumes no responsibility in the event of failure to comply with the assembly and electrical connection instructions, or electrical or other specific regulations in force at the time of installation, as well as accessories and electrical or mechanical components of Ab Tecno have been installed, used or connected without respecting the patterns and types of connections for which they were designed. Likewise Ab Tecno assumes no responsibility in case of use or application of the products for purposes that are not appropriate to the nature, capacity and degree of flow of Ab Tecno products.

For products no longer under warranty Ab Tecno srl provides an assistance service for the repair of the equipment, with charge of the relative expenses. In the case of non-repairable equipment, Ab Tecno srl may, at its sole discretion, provide for their replacement, charging them each related cost to the customer.

8. Complaints and responsibilities for defective products

- Possible claims for shortages or failures apparent from the external examination of the packages containing the goods must be elevated, under penalty of forfeiture, upon receipt of the goods themselves, by means of a note signed by the purchaser and affixed to the delivery documentation. any claims for other defects of conformity of the goods, not detectable by the external examination of the packages, must be communicated to Ab Tecno, under penalty of forfeiture, by registered letter with acknowledgment of receipt, to be sent within 60 days of delivery of the products.
- In any case, merchandise returns are not allowed without the prior written consent of Ab Tecno. Ab Tecno is exonerated from any other responsibility, and in particular, from any liability for damage to property or other emerging damage or for loss of profit, direct or indirect. Furthermore, no complaint can give right to the delay or suspension of payment terms, which must in any case be made in full on what is not contested.

9. Reservation of the property

• Ab Tecno srl reserves the ownership of the goods sold until full payment. Therefore, until full payment of the price has occurred for capital and accessories, the goods delivered, wherever they are and even if they have already been resold by the customer, will remain in full and exclusive property of Ab Tecno srl.





• Checks, promissory notes and credit transfers will not be considered as payments made effective from actual collection. In case of failure Payment Ab Tecno srl can resume the immediate possession of products sold wherever they are. The Customer is obliged to communicate the names third party buyers of the products in which Ab Tecno srl will have the right to claim them and to withdraw them.

10. Payment conditions

- All payments must be made exclusively to Ab Tecno srl, and executed according to the terms and methods indicated on the invoice.
- INTERESTS OF MORA: failure to comply with the deadline set for payment will result in default interest charged to the Customer, in the measure established by the D.L. 9.10.2002, N.231, implementation of the community directive n. 2000/35 / EC, and in any case within the maximum limits of the regulations in force, without the need for communication or formal notice.
- FACULTY OF WITHDRAWAL AND SUSPENSION OF THE EXECUTION: in case of delay in the payment of even one of the agreed installments and deadlines, Ab Tecno srl reserves the right to suspend - even without notice - the execution/delivery of the order, and/or to withdraw from any contracts in progress, even if different from those to which the non-payment refers, without the Customer's right to indemnity or compensation of any kind. Failure to pay within the agreed terms will also entitle Ab Tecno srl to make further deliveries subject to the full payment of the

price expired with related interest, and of the expiring one, due to the expiry of the Customer from the benefit of the term on subsequent payments or the simultaneous provision of adequate guarantees.

The same faculties belong to Ab Tecno srl whenever changes occur in the person of the purchaser, in its structure or social structure, patrimonial situation or consistency or commercial image, as well as in cases of elevation of protests, slope of executive procedures or bankruptcy, issue of payment orders, suspensions, deferments or delays in the performance of obligations to third party creditors.

COMPENSATION: It is not allowed, unless otherwise expressly accepted in writing, any compensation between any credits claimed by the Customer in comparisons of Ab Tecno srl and the debts of the same Customer, for whatever title, deriving, inherent and/or consequent the contract of sale.

11. Patents, trademarks and distinctive signs

The Customer is aware that Ab Tecno srl products are covered by patents and are subject to Know How and Design constituting industrial property exclusive of Ab Tecno srl. It is expressly forbidden to the customer to violate these rights of Ab Tecno srl and in any case to remove, suppress or otherwise alter trademarks and other distinctive signs or acronyms of any kind affixed to the products, as well as of new ones of any nature. Unless authorized writtenly by Ab Tecno srl, any form of reproduction or use of the Ab Tecno srl trademark and any other distinctive mark on the products is forbidden.

12. Resolution clause

In case of non-payment of the price, the sale can be settled in full right at any time with the simple written communication of Ab Tecno srl to the customer to make use of this clause and without the need for no judicial formalities.

The goods delivered and not paid must be returned to Ab Tecno srl at the expense of the customer.

To this end, Ab Tecno srl, and the third party contractors in charge, are authorized to withdraw and withdraw the goods from the customers' premises.

13. Approvals

Ab Tecno srl products report the data necessary for the identification of the certifications obtained. Knowledge and compliance with any regulations that regulate the use of the charges to be charged to the installer and / or user.

14. Italian law and competent court

For any controversy that arises in the execution of the contract it is convenient to apply the Italian Law and the jurisdiction for the territory in exclusive way of the Italian Judge, Court of Bologna.

Notes	

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Find out the catalogues of our brands





NEW CATALOGUE for home automation services, made to be connected to your devices and easy to handle!





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