

CATALOGUE 11 rev.1



"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.





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, EGO32, EGO433, SH4
- > Universal multi-frequency radio keypad: EGO-KODE
- > Universal radio Antennas: SMALL, DUAL, PLANE, PIPE, BASIC433, BASIC868
- > Universal self-learning radio receivers: COPY-ONE, COPY-MINI
- > Long range radio link: MARCONI

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## Flashing lights, led traffic lights

- > Led flashing lights: MICRO-FLASH, BLINK, VOLT, ALF6, ALF-LUX
- > LED flasher battery-operated and with motion sensor: POWERLED
- > Universal spare board: RETROFIT
- > Universal high luminous efficiency spare board: RETROFIT SLIM, MEGA RETROFIT
- > Traffic light: TRAFFIC and MICRO-TRAFFIC
- > Led signalling light: MICRO-RGB
- > Central management unit for 2-way traffic light systems: TRAFFIC CONTROL
- > Traffic light kits for manual access management: RADIO-KODA

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## Photocells and safety device

- > Sensitive safety edges: ACTIVE, ACTIVE-R3 and CAPTIVE
- > Photocells: MICRO-P27S, REFLEX, INFRA 16, P41, P37B and SW50
- > Crushing force gauge for gates and motorized doors: CERTIFIKO

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## Universal control units

- > Control unit and accessories for shutters: SH230
- > Central unit with remote control-controlled electric brake for motorized rolling shutters: SH230POWER
- > Control unit for motorized rolling shutters with integrated courtesy light: SH230LUX
- > Control units: 051D and 12.24D
- > Central control unit for sliding gates: K82

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# **PRODUCT LINES**

## **Metal mass detectors**

- > Metal mass detectors, MAGNETIX range: BASIC, BASIC-DGL
- > Sensor for opening industrial doors: RM620
- > Industrial door sensors (opening and safety): KABUTO
- > Sensors for automatic doors: SSR-3, HR100-CT, 3H-IR14C e HR50-UNI

## page A57

### Door opening buttons non-contact, touch and mechanical

- > Non-contact buttons: J-WAVE, CLEARWAVE, AERWAVE, MTT-IR, MTT
- > Mechanical buttons: PUSH PLATES

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### **Mechanical accessories**

- > Manual Bar and Protection module: MOVEO, UNI-SAVE
- > Rack and fixing elements: CRP and CRM
- > "Parachute" brakes for sloping sliding gates: CONTROLGIR
- > Columns, Fall Protection Cables and Electric Locks
- > Roller shutter locks
- > Batteries and Electric Cables
- > Enclosures for stainless steel electronic control units: BOXX

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# **KEY**- Symbols in the catalogue





ECO-technology

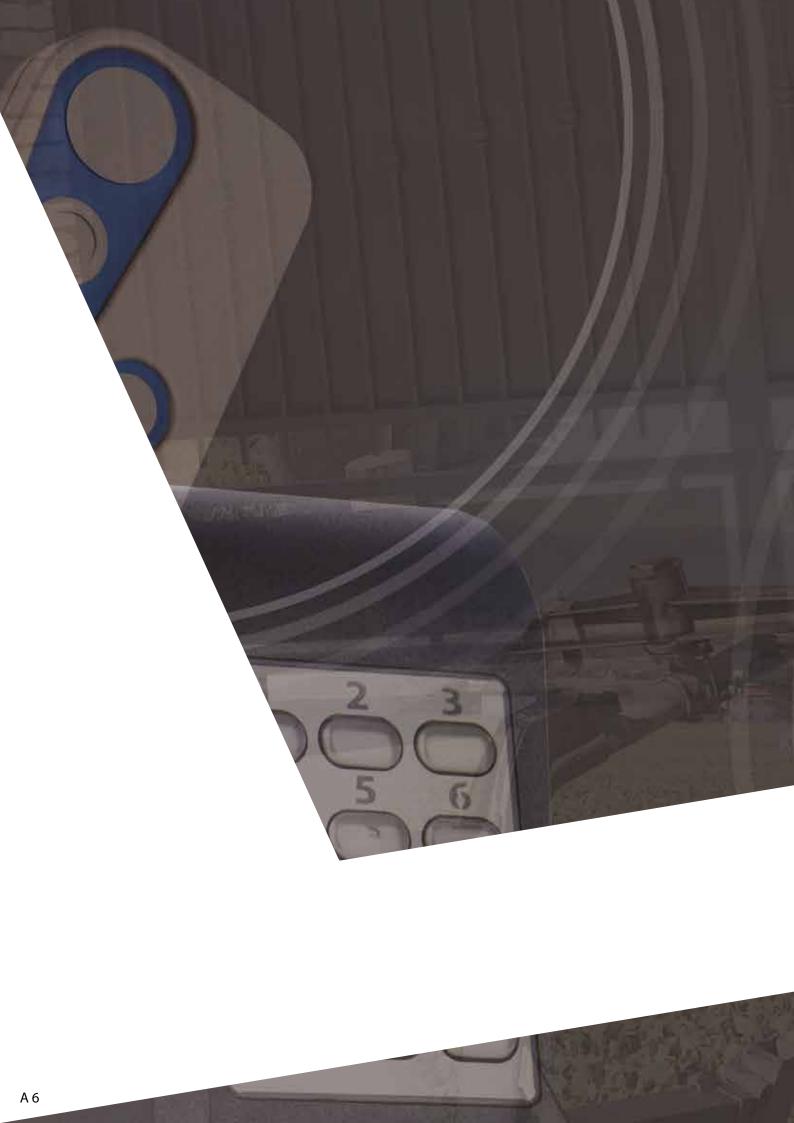
MADE IN IT ALY

Product with Class 2 safety device certificate: it avoids crashes againts obstacles, cars or people

MARE # GEMAN

Product manufactured with attention

to low energy consumption



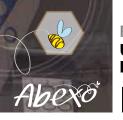
# **Radio products**

Multi-frequency transmitter EGO, EGO32/A8 433,92MHz transmitters EGO433, SH4/A10 Multi-frequency keypad EGO-KODE/A11 Radio ANTENNAS/A12 "Universal" multi-frequency receivers COPY-ONE, COPY-MINI/A13 Long range radio link MARCONI/A14





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





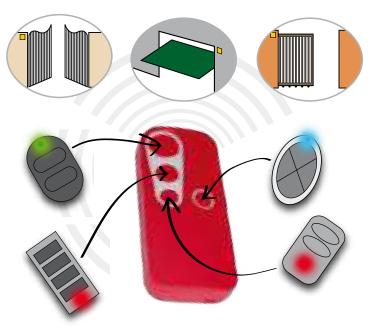
Duplicating the original transmitters has never been so easy! A shell of new design, linear, light and intuitive contains a jewel of technology.

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).



Unify the existing transmitters THE ALTER-**EGO** OF YOUR TRANSMITTERS

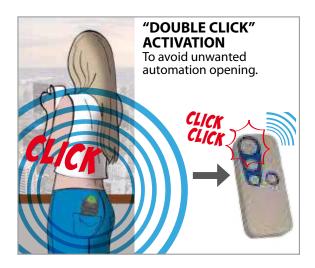
> because is an emulator of an original brand transmitter

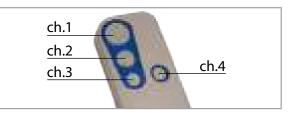




NADE IN IT ALY





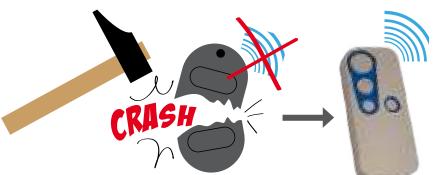




Scan the QR code / click on the link
Visit our website
EGO / EGO32
https://bit.ly/3sOlzGf

# Radio products/ Universal 4-channel multi-frequency transmitter EGO (from 433,92 MHz to 868,35MHz)





The table in the

brand A

brand B

brand C

N2

N5

N6

instructions

# **CODE GENERATOR FEATURE**

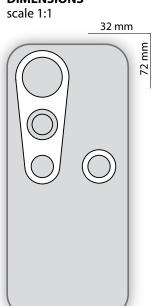
If the original transmitter is not available or damaged EGO is provided internally with the codes from the models described in the instructions.

#### 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.

See example:

#### DIMENSIONS



To add the code of "BRAND A" in the EGO transmitter, press N2 times the button that you want to store (see the first row in the table). For "BRAND B" instead, press it N5 times (see the second row in the table).





version EGO32



Both versions, **EGO / EGO32** can copy all fixed codes from 433,92 to 868,35 MHz. The algorithms of rolling codes that are not stored in EGO, are added to EGO 32. Check the user manual on our website to discover which EGO fits your needs.





> Scan the QR code / click on the link Visit our website EGO / EGO32 https://bit.ly/3sOlzGf



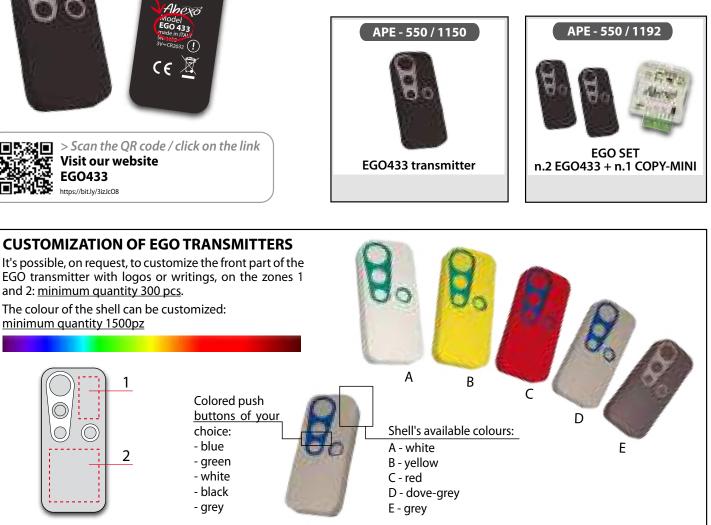
## Radio products/ 4 Channels Transmitter with 433,92MHz frequency (keyless emulator of fixed and rolling codes – HCS standard)



version EGO433

Self-learning 433,92 Mhz 4 channels 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.



# Radio products/

4-channel keypad with 433,92MHz frequency SH line control units





Self-learning, 4-channel keypad with 433,92 Mhz frequency. Entirely made in Italy, it transmits a **HCS cod with AB tecno key**.

The batteries are n.2 type CR2016, and the keypad informs the owner of its battery status by changing its blinking lights.

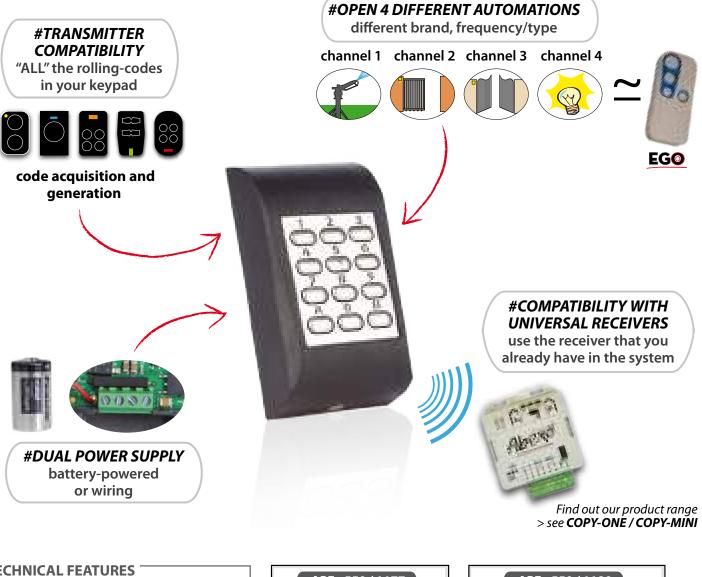


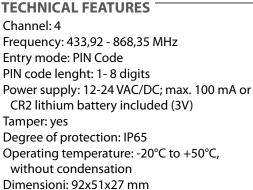


# Radio products/ Universal 4-channel multi-frequency keypad (from 433,92 MHz to 868,35MHz)

# 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.











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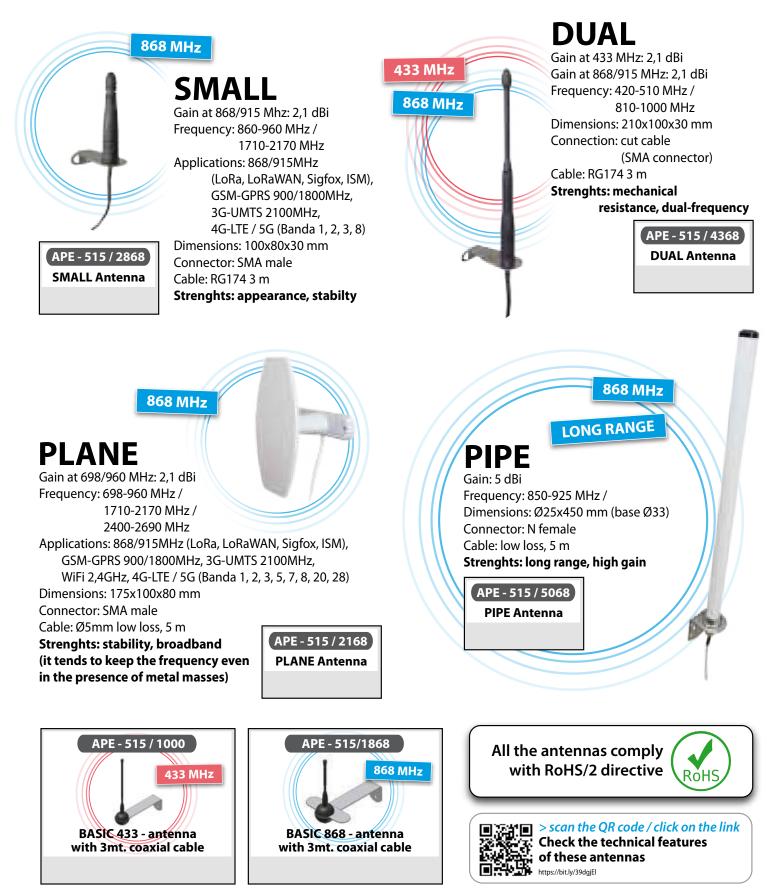


Radio products/ Radio Antennas

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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.



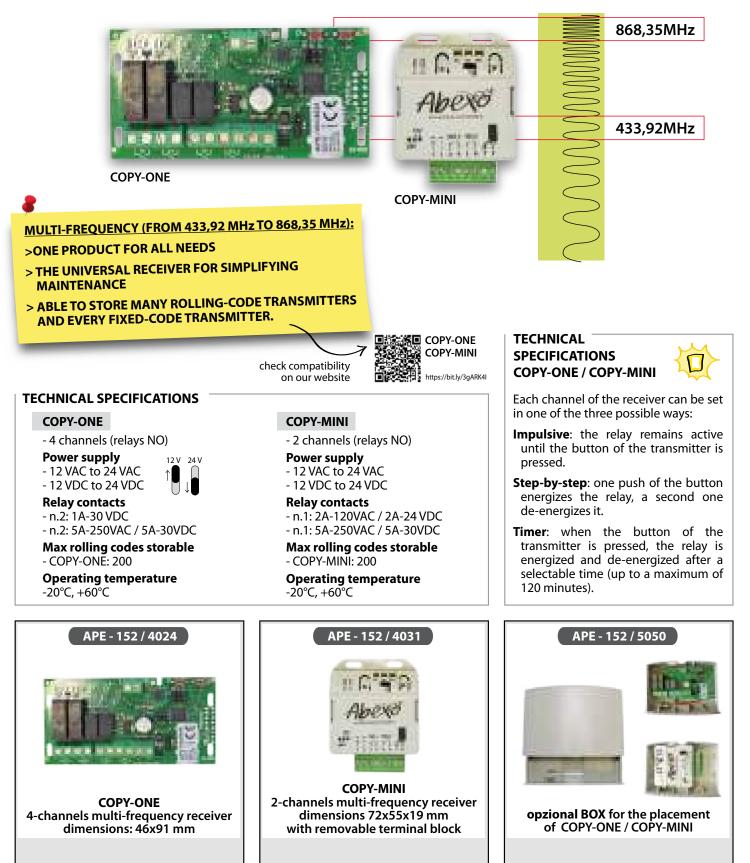
# Radio products/ "Universal" self-learning receiver multi-frequency (from 433,92 MHz to 868,35 Mhz)





The universal receivers **COPY-ONE** and **COPY-MINI** allow extreme versatility in both new and existing installations.

Extreme flexibility: they allow storing remote controls from didifferent distances, with fixed and rolling codes, inside a single receiver. Therefore, the universal receivers allow, in most cases, to unify installations or replace receivers no longer operating without the need of replacing the existing remote controls, thus ensuring better service continuity and less discomfort for users.

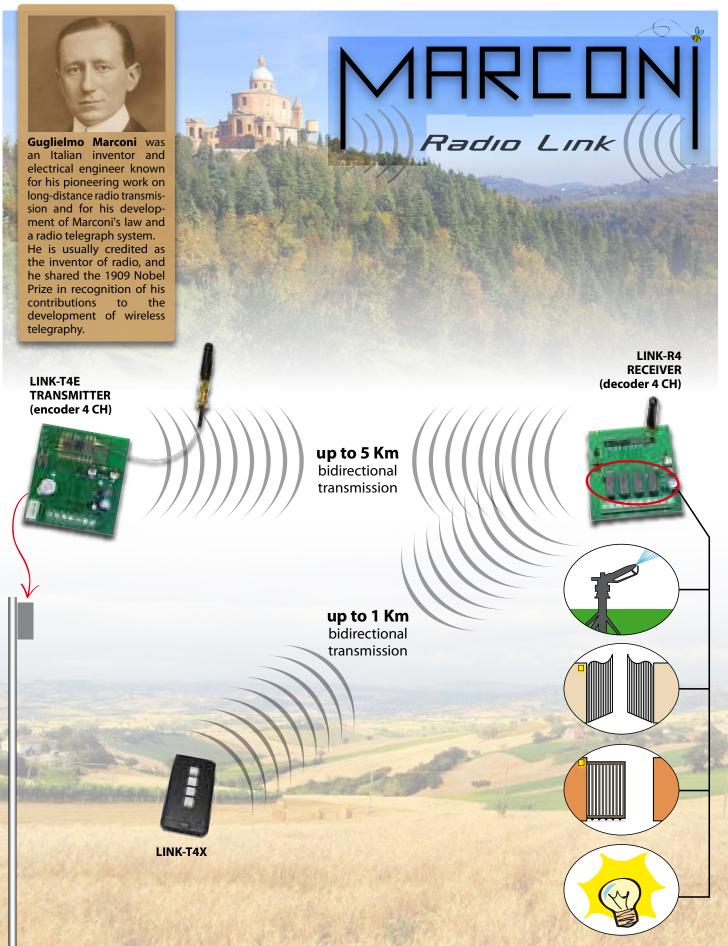




Radio products/ Long range radio link, low power consumption



# Abexe MARCONI



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-T4E** and **LINK-R4**.

LINK-T4E is a transmitter with encrypted communication capable of driving the LINK R4 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**

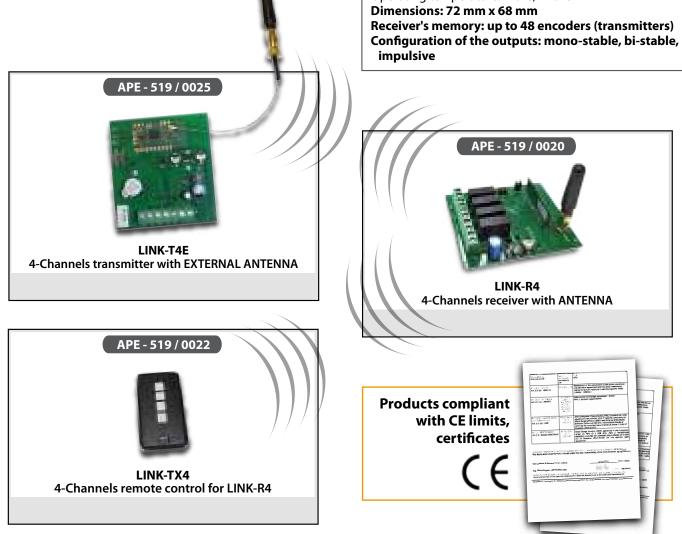
This bi-directional communication makes it possible for the transmitter to know the status of the activated output. The transmitter LINK-T4E allows up to 5 Km of bi-directional transmission whilst LINK-T4X up to 1 Km.



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

### **TECHNICAL DATA**

Voltage: 9÷26 Vdc / 12÷26 Vac Average consumption at rest with all the contacts open: decoder = 0,8÷1 mA Maximum consumption (Tx RF) with all the contacts open: encoder = 45 mA / decoder = 45 mA Max relay contacts power: 5A@12VDC / 5A@220VAC Frequency: 868,30 MHz RF power: decoder = 13÷14 dBm / encoder = 10÷12 dBm Modulation: LORA<sup>™</sup> Operating temperature: -20°C, +70°C Dimensions: 72 mm x 68 mm Receiver's memory: up to 48 encoders (transmitters) Configuration of the outputs: mono-stable, bi-stable, impulsive







# Flashing lights, led traffic lights

Wall-mounted led flashing light MICRO-FLASH / A18 LED flasher battery-operated and with motion sensor POWERLED / A19 Universal spare board RETROFIT / A20 Universal high luminous efficacy spare board MEGA RETROFIT / A21 Universal, LED multi-tension flashing light BLINK, MEGA BLINK / A22 Universal, LED multi-tension flashing light VOLT / A23 Universal, LED multi-tension wall-mounted flashing light ALF6 and ALFLUX / A24 LED 12/24v traffic light TRAFFIC / A26 LED traffic light for pedestrian access MICRO-TRAFFIC / A28 LED signalling light MICRO-RGB / A29 Traffic light kits for manual access management RADIO-KODA / A30 Central management unit for 2-way traffic light systems TRAFFIC CONTROL / A30





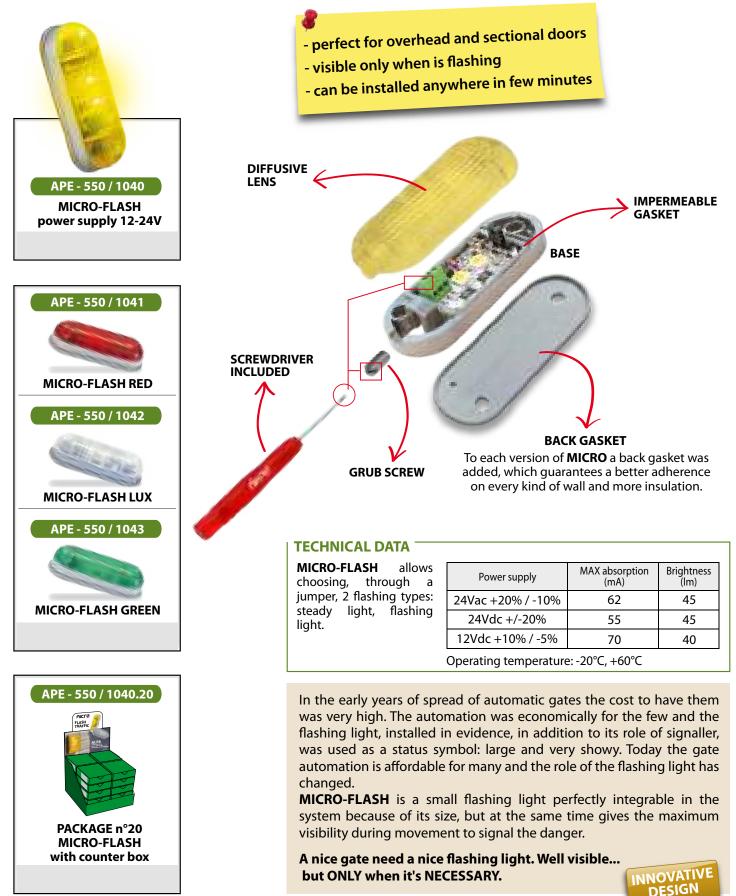
Led flashing lights/ Wall-mounted led flashing light

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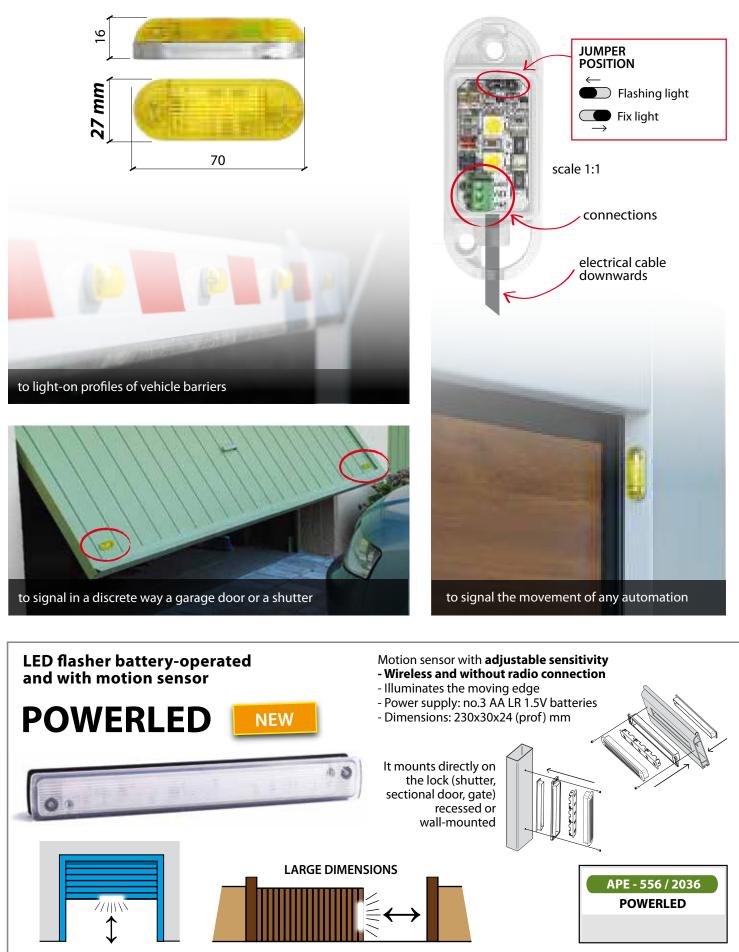


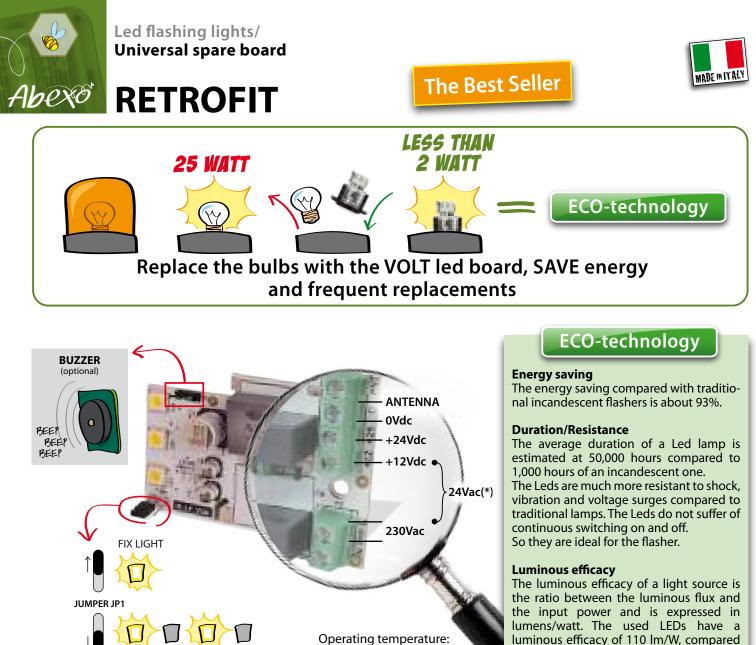
**MICRO-FLASH** is the innovative led flashing light designed to make the automation of garage doors more beautiful and high tech looking



# Led flashing lights/ Wall-mounted led flashing light







Operating temperature: -20°C, +50°C

(\*) see instructions for 24 Vac connection

to 13 lm/W incandescent lamps.

EXAMPLES OF COMPATIBILITY WITH MORE POPULAR BRANDS:

FLASHING LIGHT



# LED flashing lamps/ Universal high luminous efficacy spare board

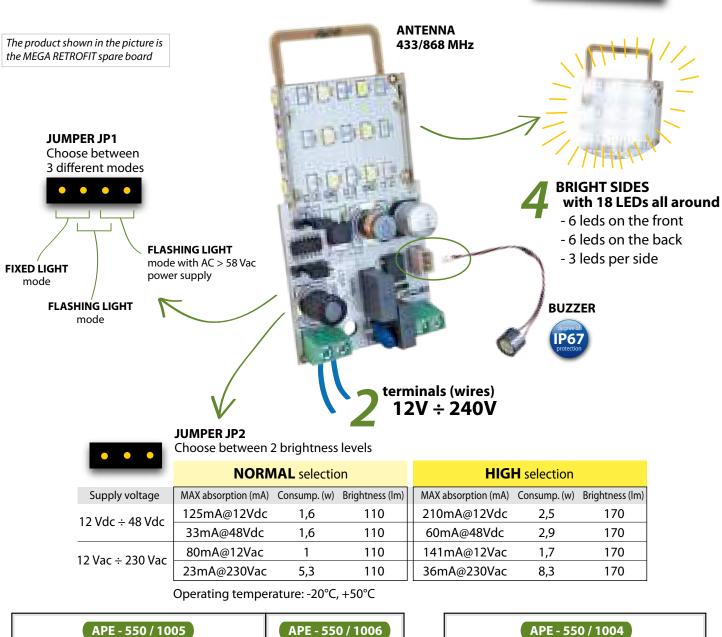




PATENTED

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.







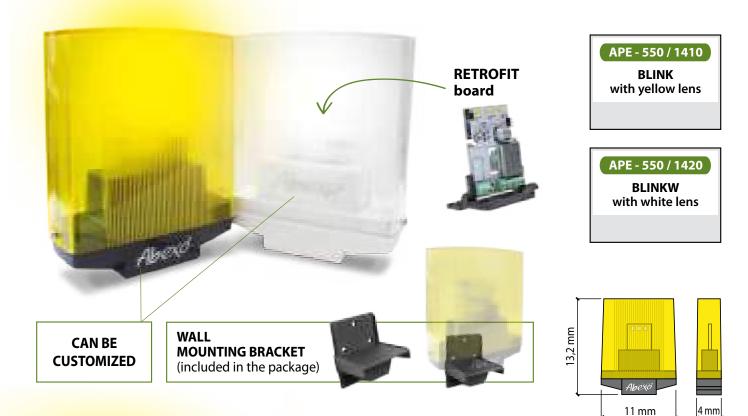


# Led flashing lights/ Universal led flashing light, multi-tension

# **BLINK**







# MEGABLINK

Universal led flashing light, multi-tension, high luminous efficacy



# Led flashing lights/ Universal led flashing light, multi-tension



# VOLT

#### WIDE RANGE OF APPLICATIONS BUZZER ACOUSTIC Volt is the unit of measure-1 SIGNAL ment of the electrical po-(optional) tential and the potential n°6 LED(s) HIGH **EFFICIENCY AND** difference. It is named in LOW CONSUMPTION honor of Alessandro Volta, who in 1800 invented the voltaic pile, the first electrochemical battery. In 1880, Antenna the International Electrical connector Congress now the Interna-433/868MHz tional Electrotechnical Commission (IEC), approved the 0Vdc volt (unit of measure) for the +24Vdc electromotive force. +12Vdc The symbol of the Volt is "v". 24Vac(\*) 230Vac FLASH BY SELECTION JUMPER: FIXED OR ALTERNATE "UNIVERSAL" POWER 12V, 24V and 230V **TECHNICAL DATA** mm APE - 550 / 1010 Voltage: 230Vac (+/-10%) 50/60Hz 12/24/230V Current: 80mA (+/-20%) VOLT flashing light with Luminous flux: ~ 80lm 92 mm antenna terminal board Voltage: 24Vdc (+/-20%) 433/868MHz Current: 80mA (+/-20%) color: yellow/black Luminous flux: ~ 80lm Voltage: 12Vdc (+/-20%) **IP65** шш Current: 40mA (+/-20%) Luminous flux: ~ 30lm 30 Operating temperature: -20°C, +50°C APE - 550 / 1011 **ECO-technology** Buzzer Power consumption: less than 2 watts. (optional) Ē 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 incande-APE - 550 / 1015 APE - 550 / 1014 scent. 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 90° wall mounting bracket 90° rotation bracket 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



# Led flashing lights/ Wall-mounted universal led flashing light, multi-tension



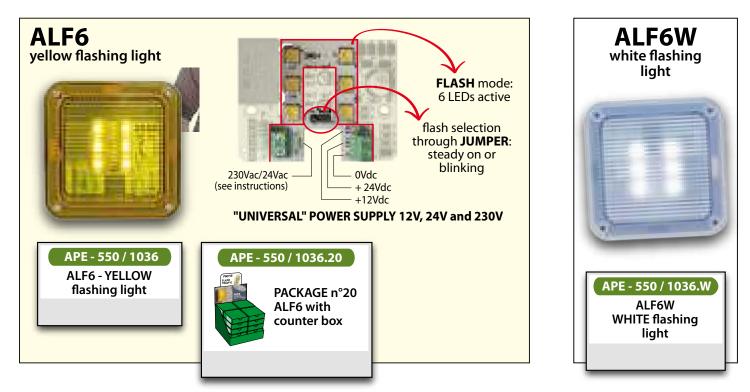
# ALF6



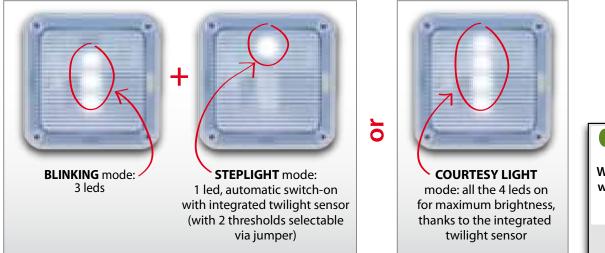
The wall-mounted led flashing light ALF6 is easy to install and elegant. Its multi-tension power (12/24/230V) makes it suitable for use with all control units, thanks to its flash selection jumper.

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 flashing light with twilight sensor and 3 operating modes

# Led flashing lights/ Wall-mounted universal LED flashing lamp, multiple-voltage





ALF6/ALF6W	<b>I</b> line	AL	.F-LU	<b>X</b> line 🏼	Charles and
current (6 led - luminous flux)	lumen	current (1 led - extra)	lumen	current (4 led)	lumen
max 80mA	80lm	-	-	-	-
max 80mA	80lm	max 35mA	30lm	max 90mA	85lm
max 80mA	80lm	-	-	-	-
-	-	max 150mA	30lm	max 280mA	85lm
max 40mA	30lm	-	-	-	-
	current (6 led - luminous flux) max 80mA max 80mA max 80mA -	(6 led - luminous flux) lumen max 80mA 80lm max 80mA 80lm max 80mA 80lm	current (6 led - luminous flux)lumencurrent (1 led - extra)max 80mA80lm-max 80mA80lmmax 35mAmax 80mA80lmmax 150mA	current (6 led - luminous flux)lumencurrent (1 led - extra)lumenmax 80mA80lmmax 80mA80lmmax 35mA30lmmax 80mA80lmmax 80mA80lmmax 80mA80lmmax 150mA30lm-	current (6 led - luminous flux)lumencurrent (1 led - extra)lumencurrent (4 led)max 80mA80lmmax 80mA80lmmax 35mA30lmmax 90mAmax 80mA80lmmax 80mA80lmmax 80mA80lmmax 80mA80lmmax 150mA30lmmax 280mA



Led flashing lights/ Led traffic lights 12/24v

# TRAFFIC



ECO-technology

SETTORI

IN THE MINIMUM SIZE THE MAXIMUM VISIBILITY

Fori Imperiali (Roma)

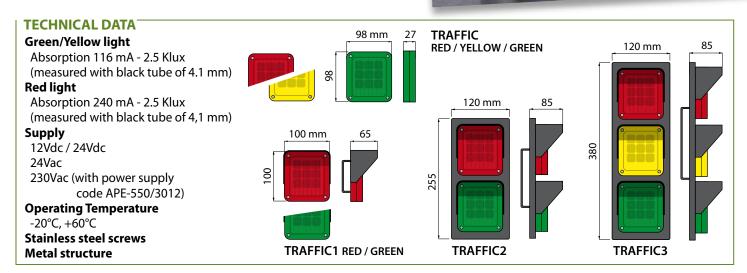
Parking Galileo Galilei (Pisa)

**TRAFFIC** is a multi-tension (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).





# Led flashing lights/ Led traffic lights 12/24v

RAFFIC 3

**BOXX-STP** 

Stainless steel bracket for

TRAFFIC 2-3 pole mounting

FFIC





www.abexo.tech

**TRAFFIC COLUMN** 

120x20x1490h mm with TRAFFIC

APE - 550 / 3023

BASE

245x295 mm for column

APE - 550 / 3012

TRAFFIC DRIVER

converter 230/12Vdc



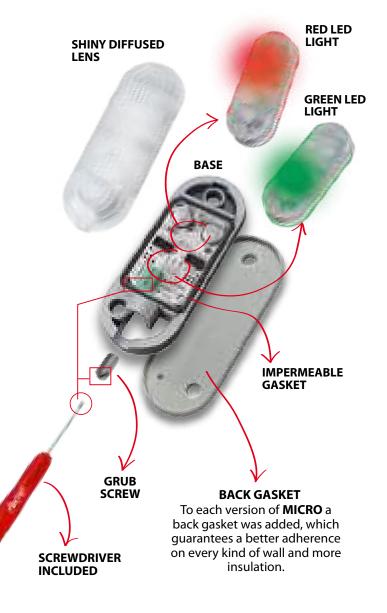


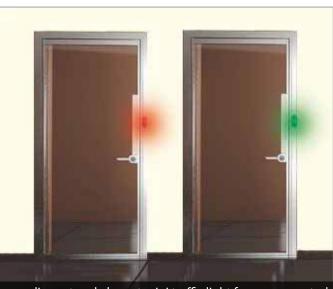
# Abexe MICIS-TRAFFIC



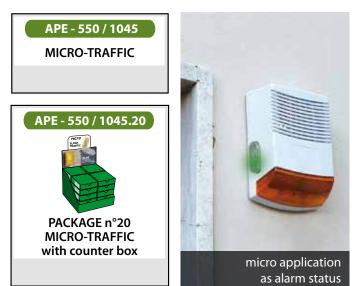
**MICRO-TRAFFIC** is a led TRAFFIC LIGHT ideal for signaling the status of an alarm system or of a door in an access control system. Thanks to its compact size, it can be easily dissimulated and can be applied either on the wall or in the door jambs without affecting (ruin, dirty, etc.) the aesthetics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

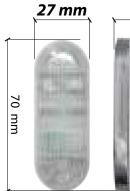
The steel/glass colours of the materials used match both the traditional doors and door frames in aluminium (or other material).





discreet and elegant mini traffic light for access control







16 mm

### **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		GREEN		
Power supply	MAX absorption (mA)	Brightness (lm)	MAX absorption (mA)	Brightness (Im)	
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					

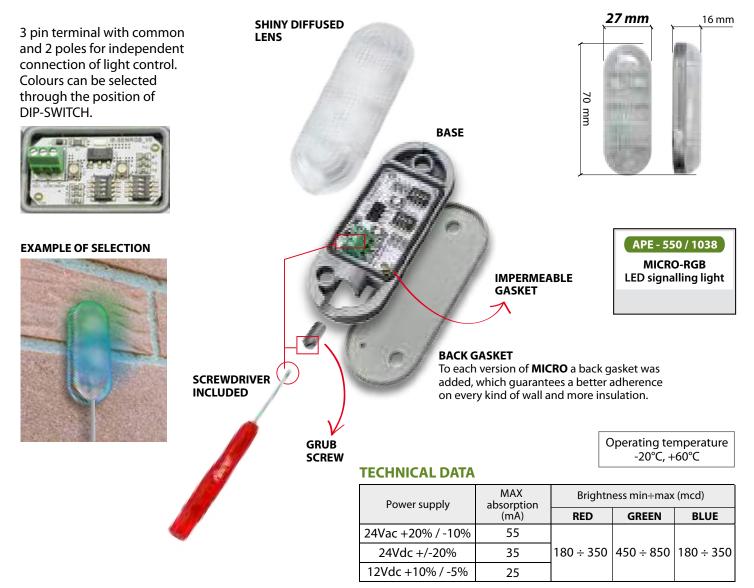
# Led flashing lights/ Led signalling light

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**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.



## **Table of DIP-SWITCH selection**

	COLOR SELECTION					
	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

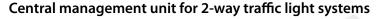




Led flashing lights/ Traffic light system management control units for driveways

TRAFFIC CONTROL







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)



# **RADIO KODA**

# Traffic light kits for manual access management



Suitable for small/medium user environments and ussi. Red/green traffic light signaling is controlled by an 868 Mhz two-channel radio transmitter. The operator manually counts the number of users in the area and selects via the transmitter the access or stop colors. The special conguration of the radio receiver eliminates the possibility of simultaneous lighting of the lanterns, and each channel of the transmitter controls the single colours.



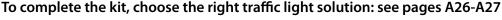
## APE-550/3072

- <u>The kit contains</u>: - no.1 IP65 watertight container
- no.1 868 MHz two-channel remote control
- no.1 868 MHz two-channel radio receiver congurate for two-light traffic light configured for two-light traffic light
   - no.1 230/12 V power supply unit

RADIO KODA









Notes	



And Personnel Name

# Photocells and safety devices

Wired safety edges ACTIVE/A34 Radio safety edges ACTIVE-R3/A35 CRASHLESS safety edges CAPTIVE/A36 Photocell MICRO-P27S/A38 Reflective photocell REFLEX/A40 Photocells INFRA16, P41, P37B, SW50/A42 Crushing force gauge for gates and motorized doors CERTIFIKO/A44



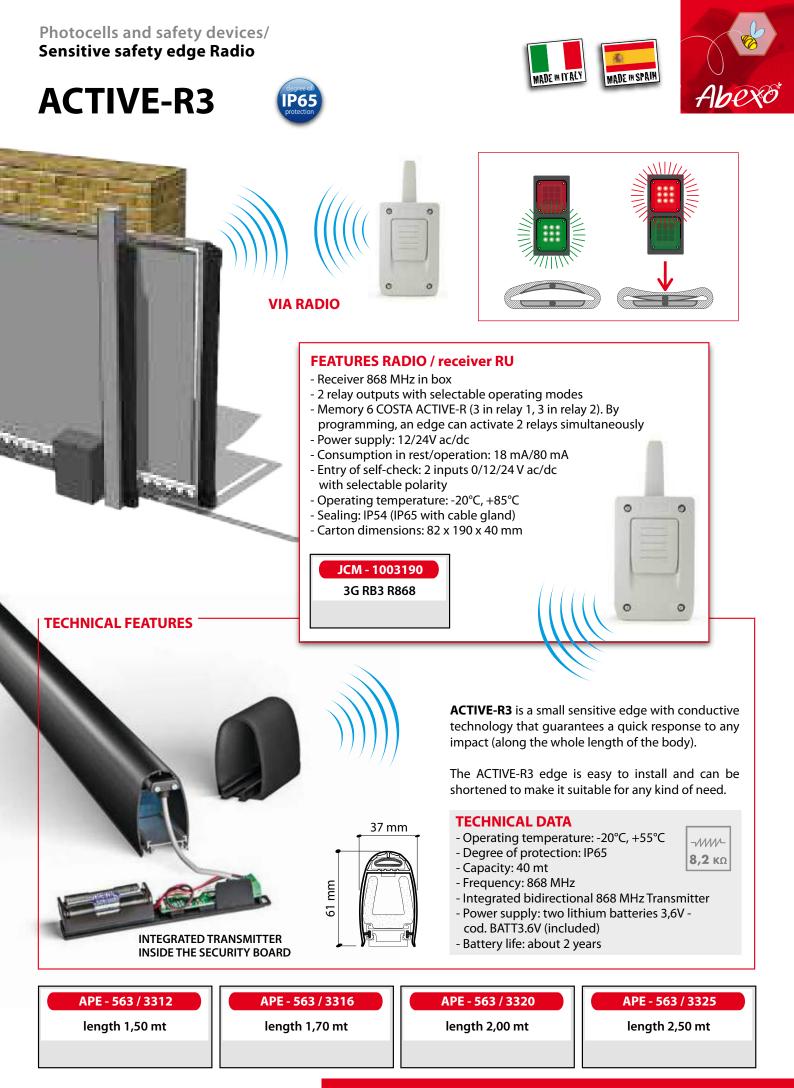


Photocells and safety devices Sensitive safety edges









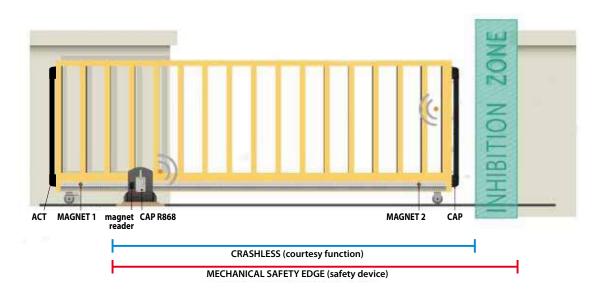


Photocells and safety devices/ Sensitive safety edges









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

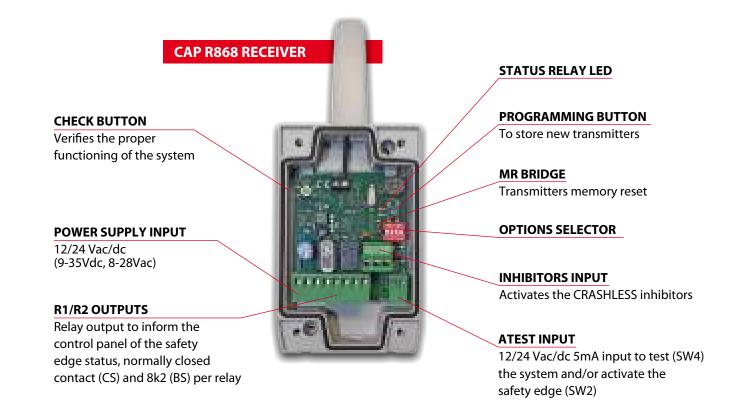
The CRASHLESS courtesy function allows detecting obstacles and avoiding the impact with them (people, car, obstacles in general).

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.

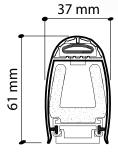
We recommend synchronizing the inhibition of the crashless function with the slowing down of the engine to be within the limits of the impact force set out in the regulations in force.

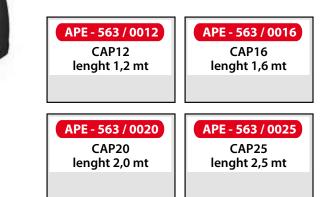


#### Photocells and safety devices/ Sensitive safety edges

#### CAP

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







**IT WORKS** 

WITH EMITTER:

#### **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









Transmitter RB3 T868



Photocells and safety devices/ Photocell with width 27mm

### Abexe MICLO-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.







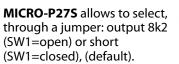


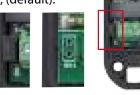




Photocells and safety devices/ Photocell with width 27mm



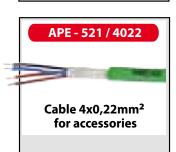




**TECHNICAL DATA** 

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





Abexo



#### Photocells and safety edges/ Polarized light photocell

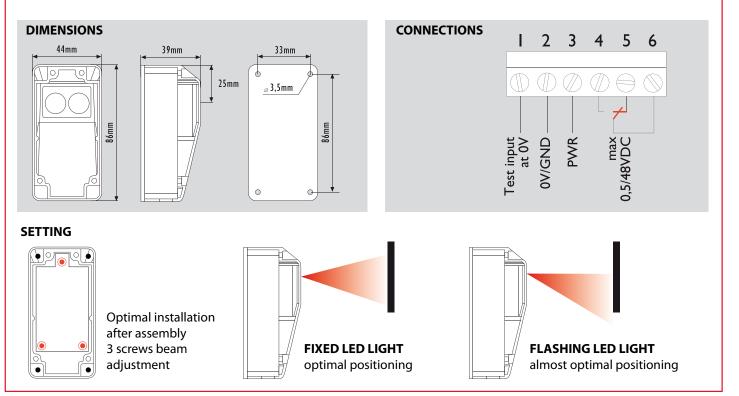
REFLEX





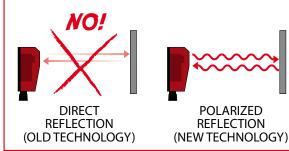
- QUICK AND EASY INSTALLATION REQUIRES THE WIRING FROM ONE SIDE ONLY.
- ON THE OTHER SIDE A REFLECTOR IS FIXED AT THE SAME HEIGHT OF THE PHOTOCELL.
- ALIGNMENT BETWEEN REFLECTOR AND PHOTOCELL IS FACILITATED TO POSITIONING LED (SEE DETAIL DRAWING "ADJUSTMENTS").
- THE FORM REFLECTOR VARIES DEPENDING ON 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**



#### SAFETY

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











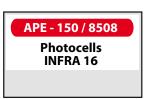


**INFRA 16** Pair of synchronized photocells



- 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

33 40mm



### P41

#### Pair of infrared adjustable photocells



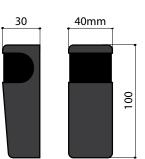
The infra-red board can be rotated 180 degrees to allow alignment between the transmitter and the receiver, even where the fixing points are not perfectly in line.

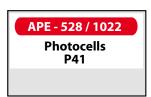
- Power supply: 12/24 Vdc/Vca
- Absorption: 60 ma
- IR wavelenght: 880 nm
- Operating temperature: -20°C to +60°C

NEW

- Relay range: 1A 24V
- Synchronized mode: only if powered with alternating current
- Modulation frequency: 1500 Hz
- Range: 15 m







### P37B

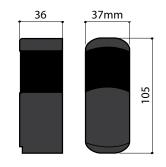
#### **Batteries movable photocells**

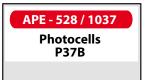


#### Receiver:

- Power Supply: 12/24 Vcc/ca - Absorption: 35mA
- -Relay 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 to +60°







#### Photocells and safety edges/ Photocell for recessed mounting







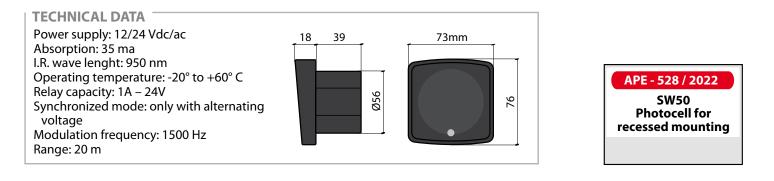




53mm

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.



### **PS24**

Power supply unit 230/24V - 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 unit PS24

## **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**

AC input voltage : 100-240 Vac Output voltage: 24 Vdc Rated c/lout current: 0,25-0,13 A Ouput current: 0,5 A Dimensions: 56 x 32,5 x 56 mm Weight: 0,06 kg

#### Application examples:

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



Photocells and safety devices/ 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



**Presa USB**: per scaricare le misure memorizzate dallo strumento al software BLUE FORCE.

Firmware: aggiornabile in modalità wireless

Batteria: ricaricabile, agli ioni di litio

**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.



#### **Cloud** area access

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

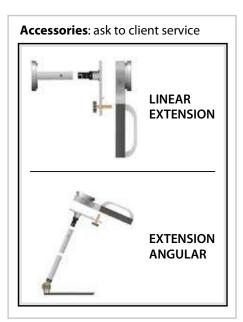
#### **KIT BLUE FORCE SMART PRO**

#### 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
- 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)







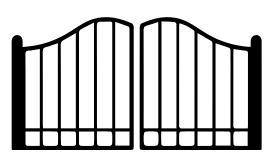
### **SECURE YOUR MOTORIZED LOCKS**

#### **European Standards - Automatic Doors and Gates**

The Guidelines and Technical Standards regulating the construction and marketing of automatic and/or motorized gates and doors are numerous and continuously updated by the technical commissions for European legislation.

GUIDELINES are European laws that once "transposed" by individual states become national laws.

TECHNICAL STANDARDS define the minimum safety requirements and criteria for the construction imposed by the Directives.



#### **Main Directives:**

305/2011/EU - Construction Products Regulation 2006/42/EC - Machinery Directive 2014/35/EU - LVD Low Voltage Directive 2014/30/EU - EMC Electromagnetic Compatibility Directive 2014/30/EU 2014/53/EU - R&TTE Radio Equipment Directive 2011/65/EC - RoHS Directive II - Restrictions on the use of hazardous substances

#### Technical Standards - Automatic Doors and Gates:

EN 12453 - Industrial, commercial and garage doors and gates - Safety in use of motorized doors, Requirements and test methods EN 16005 - Motorized pedestrian doors - Safety in use, Requirements and test methods. EN 60335-2-95 - Particular requirements of vertically moving garage doors for residential use. EN 12978 - Industrial, commercial and garage doors and gates - Safety devices, Requirements and test methods EN 12100 - Machine safety - General principles of design - Risk assessment and risk reduction EN 13856-2 - Machine safety - Pressure-sensitive protective devices, Part 2 General principles of design EN 13857 - Machine safety - Safety distances to prevent danger zones being reached by upper and lower limbs EN 13849-1 - Machine safety - Safety-related parts of control systems, Part 1: General design principles

#### **Product Standards - Doors and Gates:**

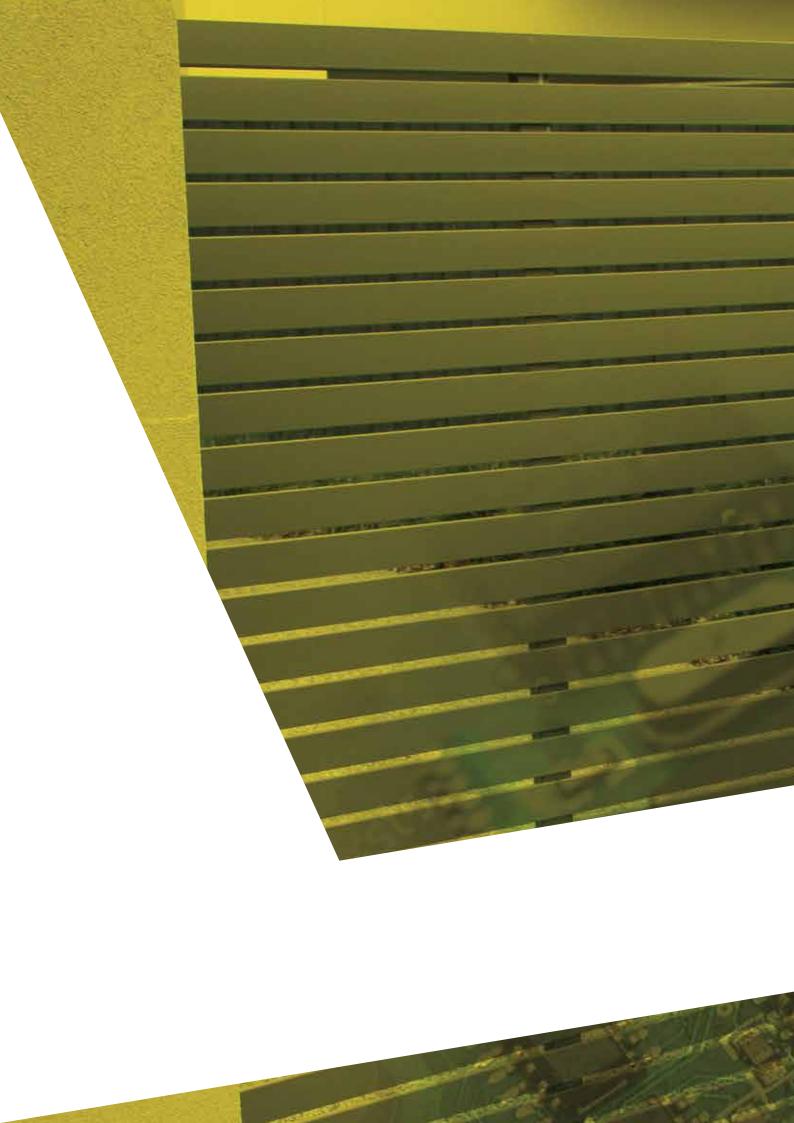
EN 13241 - Industrial, commercial and garage doors and gates - Performance characteristics. EN 12604 - Industrial, commercial and garage doors and gates - Mechanical aspects, Requirements and test methods EN 12433 - Industrial, commercial and garage doors and gates - Terminology, Types of doors EN 12424 - Industrial, commercial and garage doors and gates - Wind load resistance, Classification EN 12444 - Industrial, commercial and garage doors and gates - Resistance to wind load, Tests and calculations EN 12425 - Industrial, commercial and garage doors and gates - Resistance to water penetration, Classification EN 12489 - Industrial, commercial and garage doors and gates - Resistance to water penetration, Test method EN 12426 - Industrial, commercial and garage doors and gates - Air permeability, Classification EN 12427 - Industrial, commercial and garage doors and gates - Air permeability, Test method EN 12428 - Industrial, commercial and garage doors and gates - Air permeability, Test method EN 12428 - Industrial, commercial and garage doors and gates - Air permeability, Test method EN 12428 - Industrial, commercial and garage doors and gates - Air permeability, Test method EN 12428 - Industrial, commercial and garage doors and gates - Air permeability, Test method EN 12428 - Industrial, commercial and garage doors and gates - Air permeability, Test method EN 12428 - Industrial, commercial and garage doors and gates - Nermal transmittance, Requirements for calculation EN 16034 - Pedestrian, industrial, commercial, and garage doors - Performance characteristics and fire and/or smoke resistance

Standards under upcoming revision (2021-2022):

EN 13241 - Industrial, commercial and garage doors and gates - Performance characteristics

EN 12453 - Industrial, commercial and garage doors and gates - Safety in use of motorized doors, Requirements and test methods

- EN 16005 Motorized pedestrian doors Safety in use, Requirements and test methods
- EN 12978 Industrial, commercial and garage doors and gates Safety devices, Requirements and test methods



# Universal control units

Control unit and accessories for motorized rolling shutters SH230/A48 Central unit with remote control-controlled electric brake SH230POWER/A49 Control unit for motorized rolling shutters with integrated courtesy light SH230LUX/A50 Control unit 051D/A52 Universal control unit for automations 12.24D/A54 Central control unit for sliding gates K82/A55





#### Universal control units/ Control unit and accessories for motorized rolling shutters



### SH230



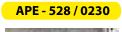
SH230 is an electronic control unit with an **integrated receiver** compatible with all the 433 Mhz fixed codes and some 433 Mhz rolling codes (\*). It is easy to install and to program: it has **TWO inputs for command devices** and 2 safety inputs (1 with normally closed contact and one for safety edges 8,3 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 minutes 30 seconds
- 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







SH230 – control unit for shutters with box



#### Universal control units/

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

### SH230POWER

 $0 \log 250$ 

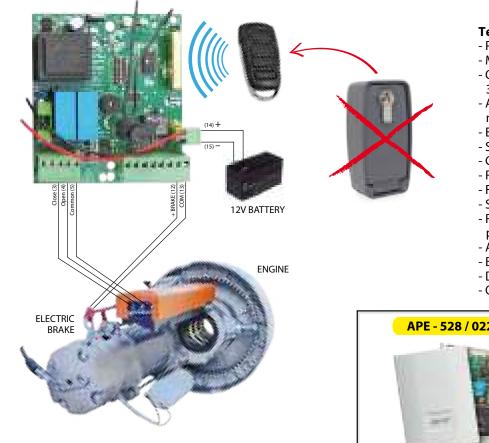






**SH230POWER** is an electronic control equipment with integrated receiver compatible with all 433 Mhz fixed codes and some 433 Mhz\* rolling codes.

Its special feature is the ability to be able to drive and unlock the electric brake of shutter motors even in case of 230V power failure thanks to a backup battery. The function is activated by pressing 2 keys simultaneously for more than 3 seconds.



#### **Technical Characteristics:**

- Power supply: 230 Vac 50 +/-10%
- Motor power: 750 W
- Operating time: programmable max 2 minutes 30 seconds
- Automatic closing time: programmable max 3 minutes
- 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



#### Universal control units/

Control unit for motorized rolling shutters with integrated courtesy light

### SH230LUX

hexo





Developed on the basis of the previous control unit, SH230, this special version is equipped with an integrated courtesy light while maintaining the main features of the base version. Its semi-transparent box allow to use SH230LUX as an applique.

Thanks to a special setting of the DIP-SWITCH, it is possible to switch on the light without opening the shutter.

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

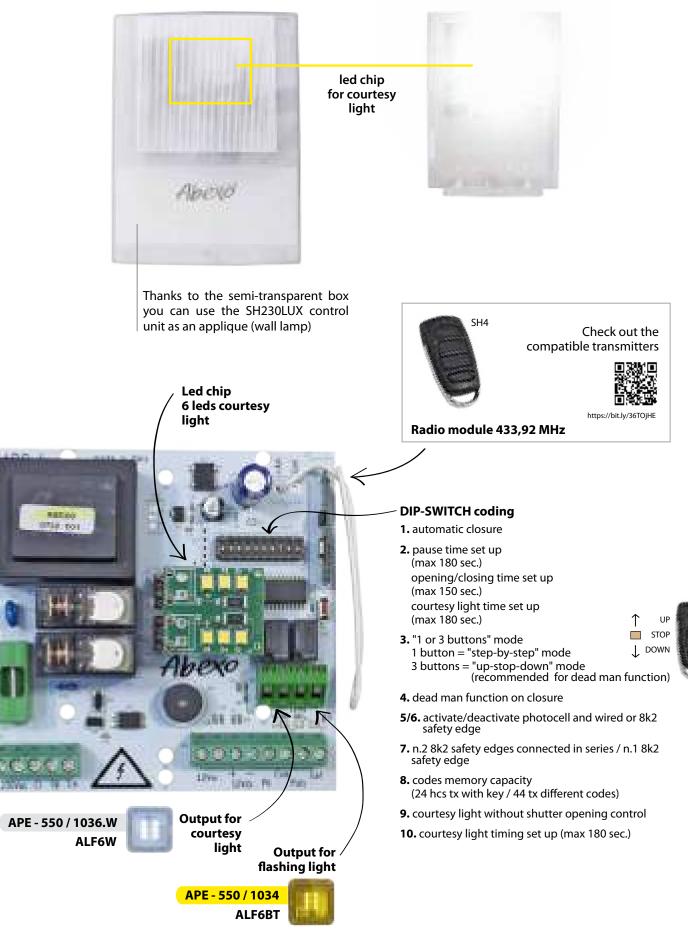


#### **Technical data:**

- 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









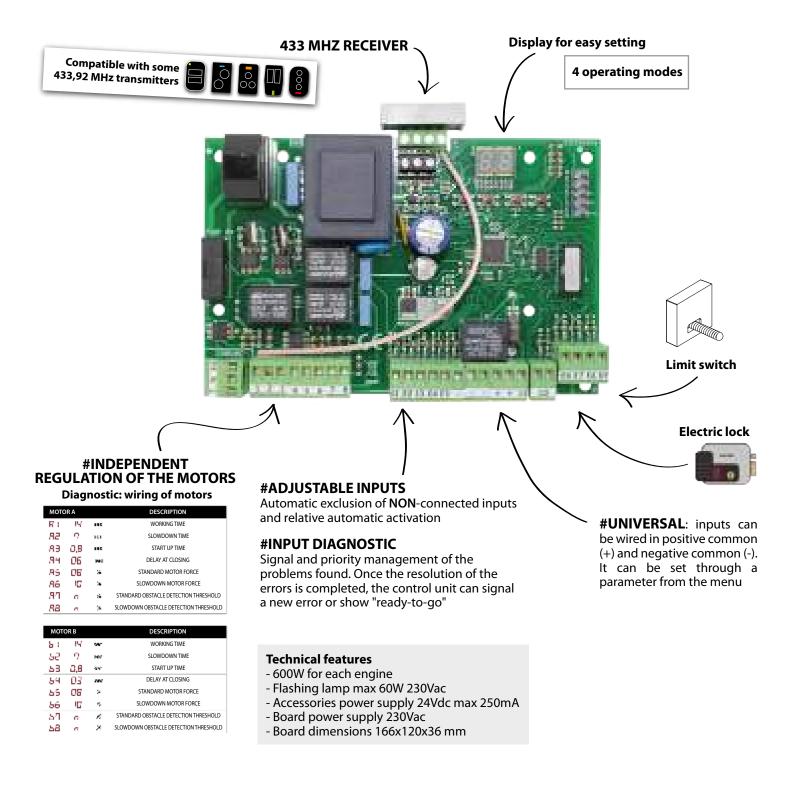
051D

#### Universal control units/ Control unit compatible with 230V elettromechanical and hydraulic engines



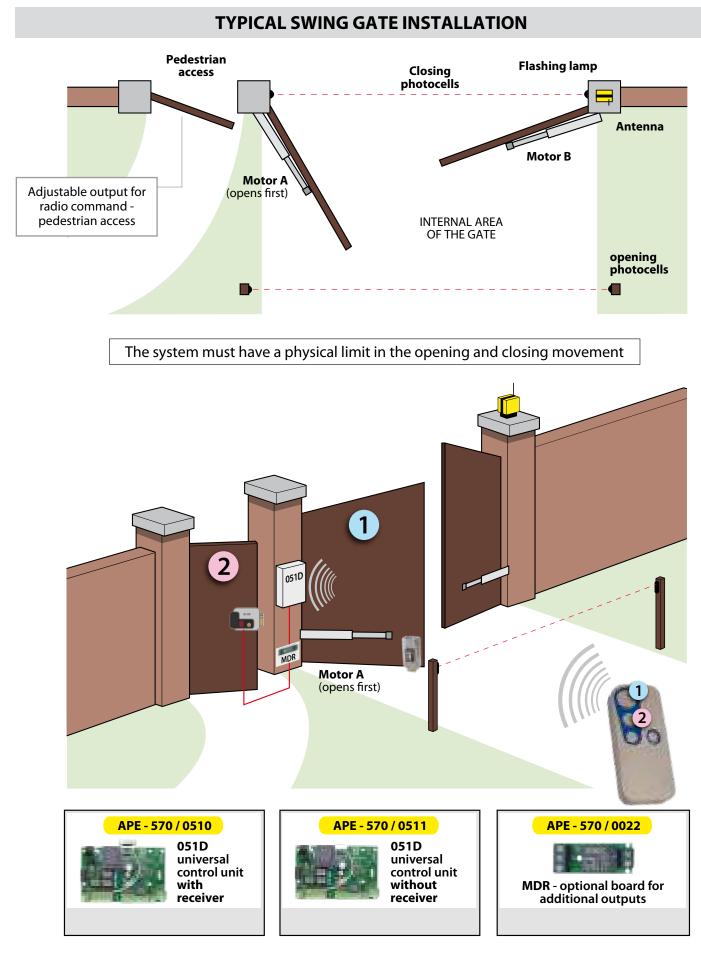
# 051D is a universal control unit with an integrated universal 433 Mhz receiver (reads and stores all the 433 Mhz fixed codes and some 433 Mhz rolling codes). In order to be universal with all the motors, the 051D control unit allow to adjust the electronic force and the electronic anti-crush system. 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.



#### Universal control units/ Control unit compatible with 230V elettromechanical and hydraulic engines







#### Universal contro units/ Control unit for automations with 2 engines 12-24V



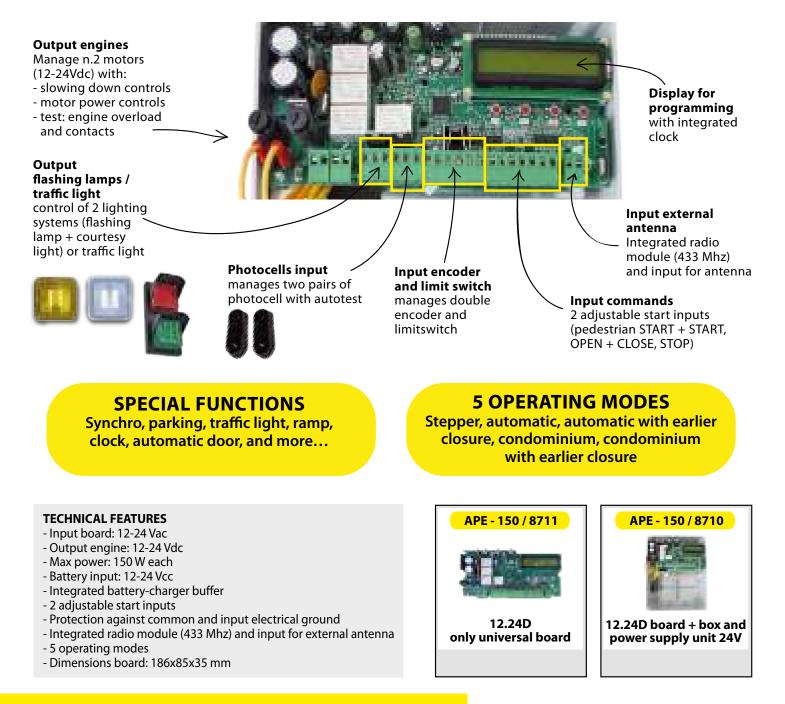
### 12.24D

12.24D is a universal control unit for automations with 2 engines (low tension 12V-24V Vdc). The integrated radio 433 Mhz receiver allows to store all the fixed codes and the 12 and 24 bit HCS codes. It is possible to set all the parameters to be compatible with all the engines, even coming from different brands and types.

The electronical components comes with an integrated power supply unit and can manage 12 and 24 Vdc power supply.

Inputs have the connection for two different and ajustable Start. Thanks to the display, the programming of inputs, outputs and operating modes - available in several languages. The control units has 2 outputs to manage the flashing lamps, courtesy and traffic lights and 5 possible operating modes: step-by-step, automatic, automatic with possible earlier closing, condominium and condominium with possible earlier closing.

The 12.24D control unit also has special menu/functions for specific installations: clock, ramp, automatic door, synchro, parking. Through the OBSTACLES menu it's possible to manage currents and intervention time, thanks to the MONITOR menu that reads the current of the motor and the frequency of the encoder during movement.



#### Universal control units/ Central control unit for sliding gates





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

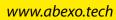
- Connection of No.3 8K2 safety edges in opening
- Connection of no.3 8K2 safety edges in closing
- Pedestrian opening
- Soft-start
- End-of-stroke slowdown
- Electronic motor brake
- No.2 optional auxiliary outputs

#### **Technical Characteristics:**

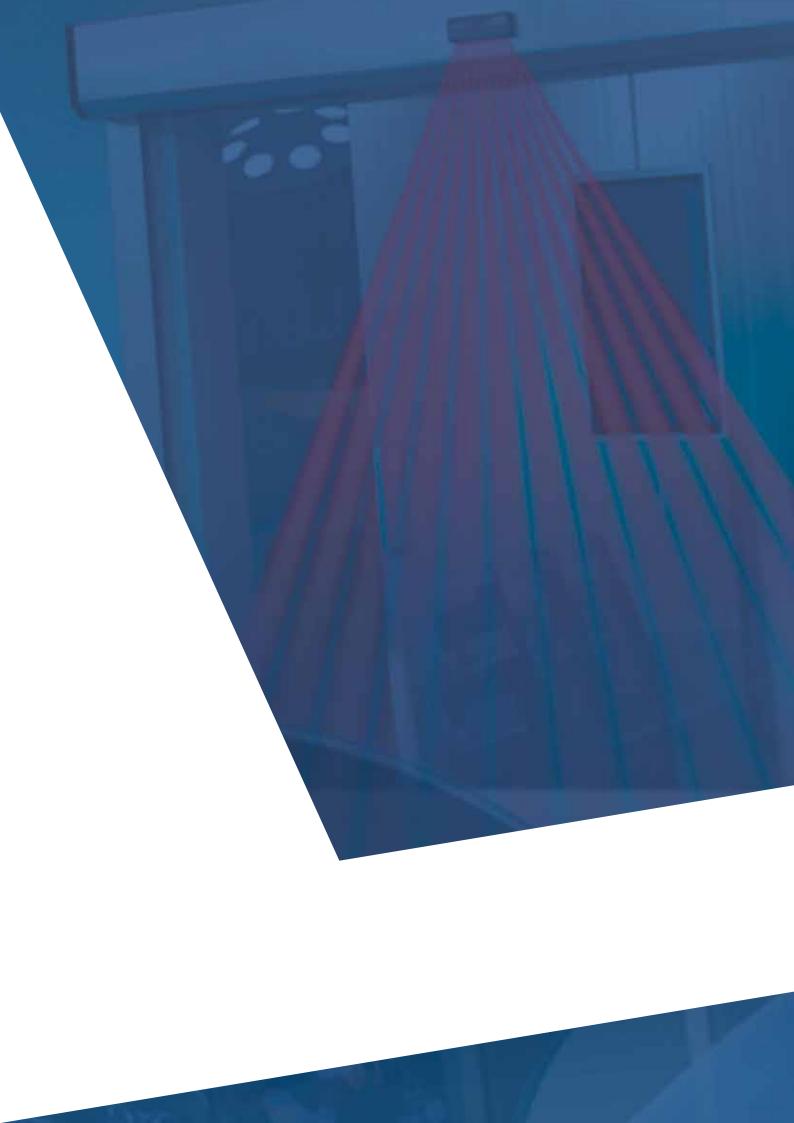
- Power supply: 230Vac
- Max managed motor power: 1000W
- Accessory power supply: 24Vdc 200mA
- Flasher output: 24Vac, 5 Watts
- 230Vac independent fixed output (flasher)
- Frequency: 433.92Mhz
- Storable radio codes: 100
- Dimensions: 137x78x33mm
- Operating temperature: -10°C, +70°C

4 LOGICS OF OPERATION automatic, condominial, step-by-step, step-by-step with automatic closing









# Detectors, Pedestrian and industrial Sensors

Metal mass detectors MAGNETIX / A58 Microwave detector for industrial door control RM620 / A59 Industrial door sensors (opening and safety) KABUTO / A60 Sensors for automatic doors / A61







Detectors, Pedestrian and industrial Sensors/ Loop detector

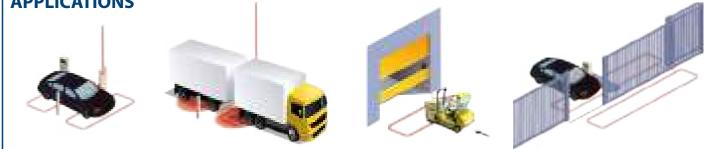
### Abexe MAGNETIX

AADE IN IT ALY

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.

MAGNETIX family consist of a mono-channel BASIC detector with DIN rack mounting .

#### **APPLICATIONS**



#### **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

BASIC **Single Channel** detector 12-24V **DIN rail mounting** 

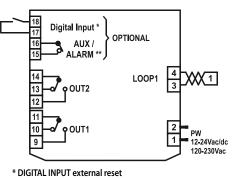


Power consumption: 80mA Inductance of the loop: from 30µH. Ideal: from 80µH to 500µH Wiring the coil: max 100m min 50x 1.5 square meters plot /m Resistance of the loop:  $< 8\Omega$  with power cord Frequency range: 20-80 kHz on 4 levels <u>Sensitivity range</u>: from 0.01% to 0.65% ( $\Delta f/f$ ) 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 Green LED + 1 Data storage: on EEPROM Housing: plastic 111x28x92, 5mm (alim.12-24Vac/dc) plastic 111x38x92, 5mm (alim.120 or 230Vac) Mounting: DIN - OMEGA guide Front protection: IPOO Operating Conditions: ambient temperature: -10°... 50°C storage temperature: -20°... 70°C

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

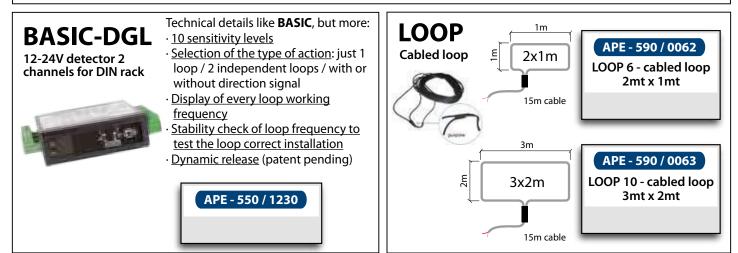
Relative humidity: Environment 30/80% noncondensing





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

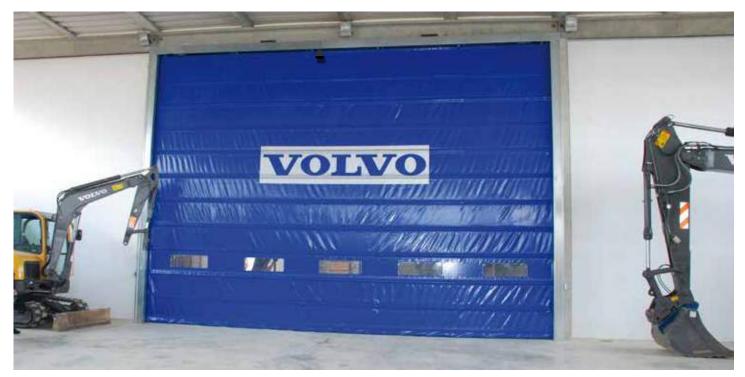




#### Detectors, Pedestrian and industrial Sensors/ Sensors for industrial doors (opening)

### RM620





Unidirectional/bidirectional, X band microwave sensor for industrial door

**Planar technology** 

Signal elaboration with microprocessors



#### **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
- Maximum height of installation: 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





unidirectional/bidirectional, X band sensor

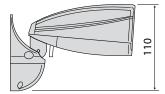
Recognition of the direction of the movement

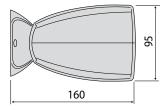
**Programmable functions** 

High resolution of the covered area

**Internal orientation** 

#### Dimensions





APE - 551 / 0620 Microwave sensor for industrial doors RM620



Detectors, Pedestrian and industrial Sensors/ Industrial door sensors (opening and safety)



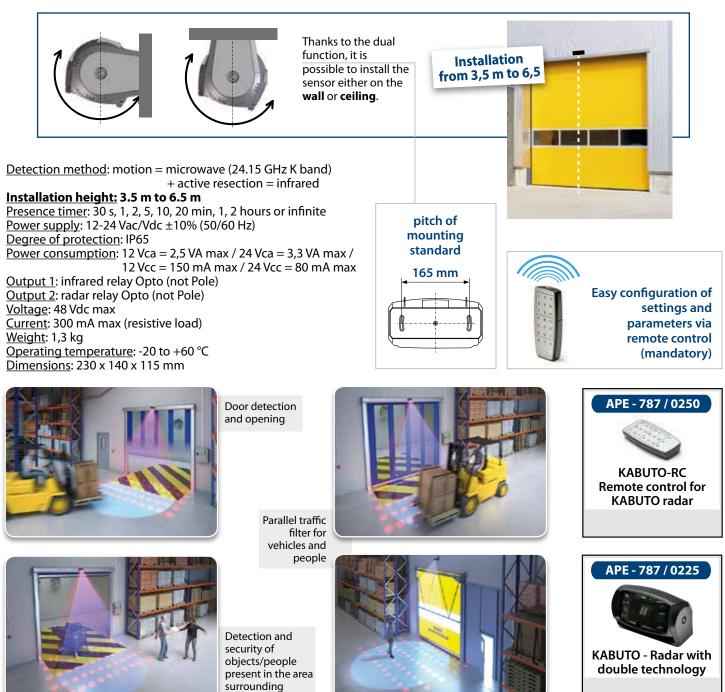
KABUTO is a dual technology sensor microwave (opening) and infrared (security). These features, combined with the anti-vibration technology, make KABUTO ideal for all installations on industrial doors.



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.







accessories available

for SSR-3/BL

HOT - WC - IR/BL

Rain cover

HOT - UTB/BL

HOT - HA - 130

mounting

#### SSR-3/BL Dual technology activation and

monitored safety sensor With exclusive "Door Learn" technology

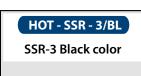


Energy-saving sensor capable of ensuring the activation of pedestrian doors and an unprecedented level of security unprecedented at mounting heights no to 3.2m.

Technologie: Mikrowelle + Aktive Infrarot Versorgungsspannung: 12-24 Vcc/Vca ± 10% Stromversorgungabsorption: 80 mA (24Vcc) Einbauhöhenbereich: regulierbar 2000-3200 mm <u>Temperaturbereich</u>: bis -20°C zum 60°C Schutzgrad: IP54 Abmessungen: 25 x 60 x 43 mm







EN16005



HOT - HR100 - CT/BL

HR100CT Black color

EN16005

### 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.

- <u>Technology</u>: 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







- Output: Open collector 7.5mA (Min) load

- Degree of protection: IP54

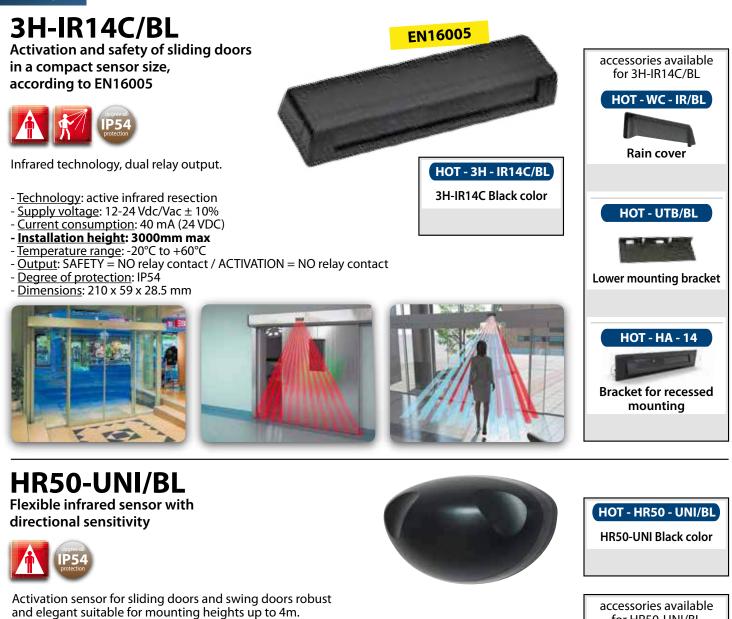
- Dimensions: 230 x 70 x 44 mm



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resistor





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

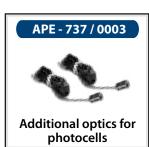
**INFRA2** 

Infrared Barrier - Fixed optics Ø10,6mm - Power supply voltage: 12-24V

- <u>Dimensions</u>: 120 x 70 x 41.5 mm







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

AC +/-10% - 12-24V DC -5/+30%







# Non-contact, touch and mechanical door opening buttons

Non-contact buttons J-WAVE, CLEARWAVE, AERWAVE, MTT-IR, MTT / A64 Mechanical buttons PUSH PLATES / A66





Non-contact, touch and mechanical door opening buttons/ Non-contact door opening sensor

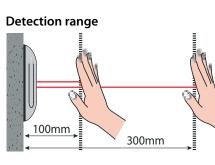
### **J-WAVE**

Non-contact door opening sensor infrared



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.

- Technology: active infrared
- Supply voltage: 12-30 VDC, 12-24 Vac
- <u>Power consumption</u>: < 1.5W
- <u>Detection distance</u>: 100-300mm ± 30-50mm
- <u>Temperature range</u>: -20°C to +50°C
- Output: Relay contact (1A /30 VDC)
- Degree of protection: IP54
- <u>Dimensions</u>: 40 x 117 x 19,5 mm













85,9mm

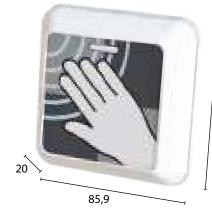
### **CLEARWAVE**

Non-contact door opening sensor microwave

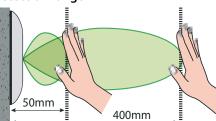


Door activation switch with

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.



#### Detection range





HOT-CLEARWAVE
CLEARWAVE Sensor

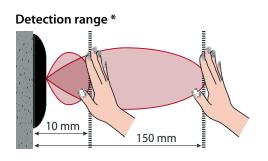
- <u>Technology</u>: microwave
- Supply voltage: 12-30 VDC, 12-24 Vac
- Current consumption: 40 mA (24 VDC)
- Detection distance: adjustable 50-400mm ±30-50mm
- Temperature range: -20°C to +60°C
- Output: relay type 1C (one switching contact)
- Degree of protection: IP55
- <u>Dimensions</u>: 85,9 x 85,9 x 20 mm

#### Non-contact, touch and mechanical door opening buttons/ 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



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





Abexo





HOT - AERWAVE Infrared and wireless botton

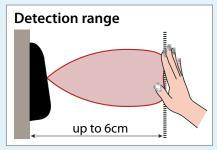
#### Non-contact capacitive infrared button - Sensor type: infrared - Surface mounting - Black ABS material - Sensing range adjustment: via dipswicth (max 6cm)

- Power supply 12/24 Vdc - Vac

**MTT-IR** 

- 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



Non-contact, touch and mechanical door opening buttons/ Non-contact 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** 

### **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

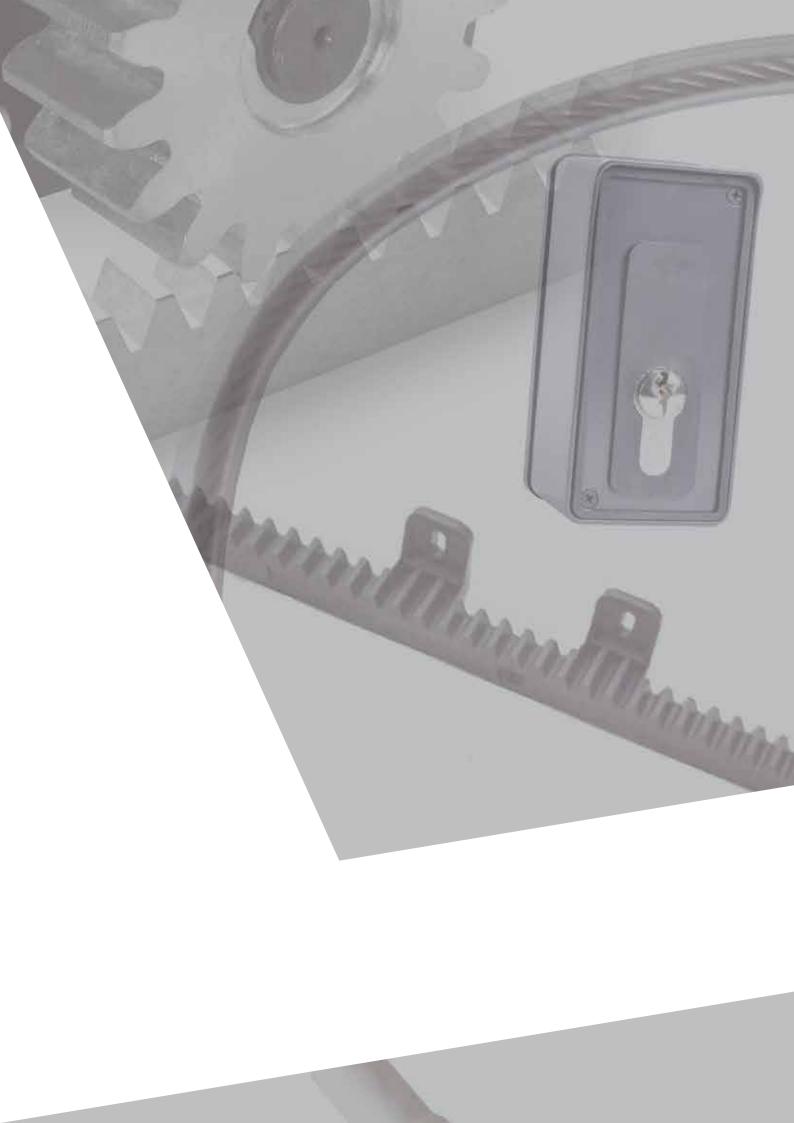
For other shapes and models ask customer service







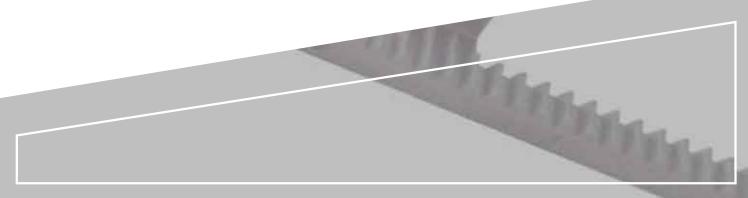
Notes	



# Devices and mechanical accessories

Manual Bar MOVEO / A70 Protection module UNI-SAVE / A71 Racks and attachments / A72 "Parachute" brakes for sloping sliding gates CONTROLGIR / A74 Columns, Fall Protection Cables and Electric Locks / A75 Key Push Buttons and Roller Blinds / A76 Roller shutter locks / A77 Batteries and Electric Cables / A78 Enclosures for stainless steel electronic control units BOXX / A79







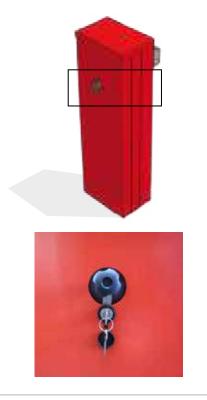
Devices and mechanical accessories/ Manual barrier







Safe boom unlocking system with key lock which guarantees a safe movement of the barrier

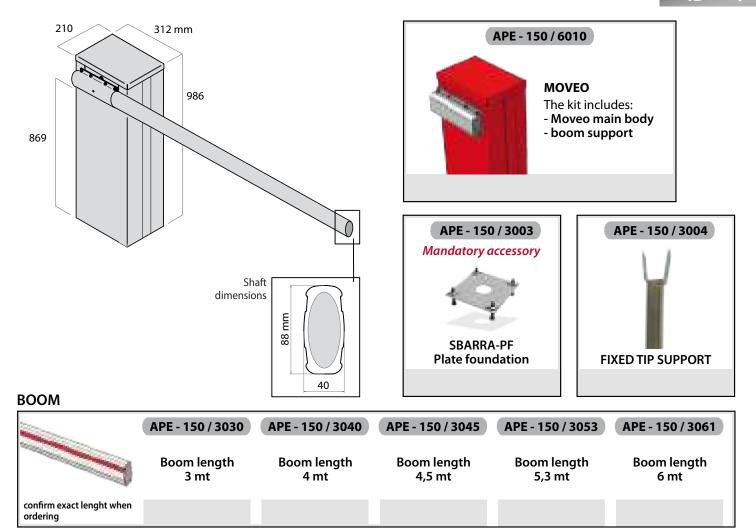


Thanks to the **internal linkage mechanism**, the movement of the rod is always balanced with the possibility of locking in the closed or fully open position.



#### Devices and mechanical accessories/ Manual barrier





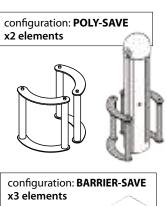


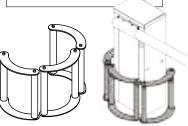




Individual module







APE - 150 / 8038 Individual UNI-SAVE module

www.abexo.tech

Is a universal access control system protection module and much more. It is made of a modular

metal structure that can be adapted to different

applications, such as for example, to protect

"POLY" chain barrier (2 elements).





### **CRP500**

Nylon rack max 500 Kg (a) for sliding gates

- Single bar lenght 1mt
- 6 mts pack of tecnopolymer rack
- N.5 central fixing elements module 4/ screws included (5 screws per meter)

NEW

- Double sided toothing to make it usable on both sides
- No steel core: design and shapes studied to cancel any chance of strain
- Maximum capacity 500 kg

### **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 / 0500 **CRP500** rack 500kg



APE - 511 / 0700 **CRP700** rack 700kg

### **CRP1200**

Tecnopolymer rack max 1200 Kg (f) for sliding gates

- Fixing elements:

1 pack = 1mt di rack

- Min. quantity purchasable: 10pcs



- 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





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

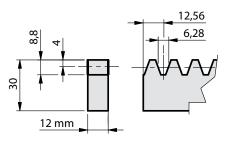
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**RACKS FIXING ELEMENTS CRP700 / CRP1200** 



**CRM3012** Steel rack for sliding gates





APE - 555 / 1020 CRM3012 galvanized steel rack (pack 4 mt)

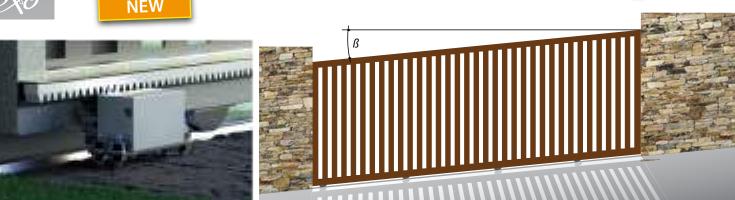
- Single bar lenght 1mt
- 4 mts pack of galvanized steel racks (module 4)
- With bolts and spacers for wall mounting (to be welded)

#### **OPTIONAL BRACKETS TO FIX THE STEEL RACK ST500** Combinable fixing brackets for CRM3012 galvanized rack APE - 563 / 5020 - Quick fixing brackets for iron rack. They can be fitted over or under rack's teeth. ST500 - fixing brackets - Max. load 500 kg max 500 kg CR - Pack for 1 mt of rack - Min. quantity purchasable: 4 pcs. **ST800** Fixing brackets for CRM3012 galvanized rack APE - 563 / 5010 - Quick fixing brackets for iron rack. They can be fitted over or under rack's teeth. ST800 - fixing brackets - Max. load 800 kg max 800 kg - Pack for 1 mt of rack - Min. quantity purchasable: 4 pcs.



#### Devices and mechanical accessories/ "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

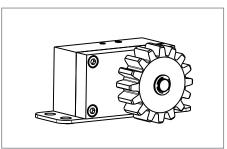
"parachute," that is, to regulate the downward speed throughout the gate's travel. The operating speed should be adjusted just above that of the gearmotor so that it does not interfere with the automation.

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

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

MADE IN SPAIN

Send us the following technical data of your installation:

- Gate weight

- ß= angle of inclination/slope
- -Module of the rack pitch

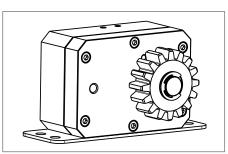
We will take care of the calculation!

### **CONTROLGIR-30**

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



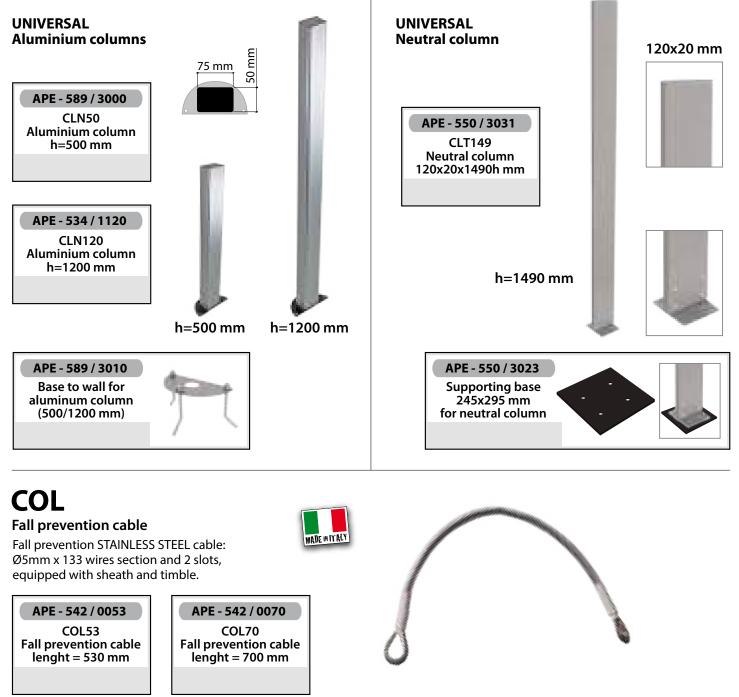
**TECHNICAL DATA** M (required resistant moment): 30 Nm Rack pitch: M4 Gate weight: 400 Kg (3920 N) Slope: 13,9° MAX



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

APE - 147 / 4009
Parachute break
13,9° - 30Nm





#### **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



#### Devices and mechanical accessories/ **Key-switch and electric lock**

### **ECO-KEY**

#### Surface-mounted two contacts key-switch



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



MADE IN IT ALY



### ECO-KEY

APE - 518 / 0030

Surface-mounted key switch

### **FLAT**

#### Aluminium wall-mounted key-switch

- 2 contacts: 16A
- Dimensions: 79x30x79h mm

APE - 136 / 6015

FLAT - Aluminium

wall-mounted

key-switch



### SMALL59



Aluminium security box with break release and push button



- Lock: made in Italy european cylinder

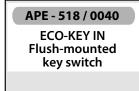
### **ECO-KEY-IN**

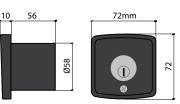
#### Two contacts flush-mounted key switch

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



MADE IN IT ALY



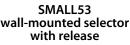


### SMALL53

#### Wall-mounted selector switch with break release

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

#### APE - 556 / 1155



### SMALL53-IN

Flush-mounted selector switch with break release

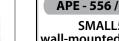
- Flush-mounted on tubular 40x60mm
- Interchangeable cylinder made in Italy
- break release with hexagonal key
- Dimensions: 57x120hx37 mm

APE - 556 / 1154 SMALL53-IN Flush-mounted selector switch with break release



#### **NEW**

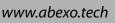














Uslock

### **EASY UNLOCK**

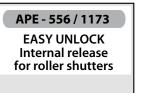


Internal release for roller shutters and emergency release for automatic doors

**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

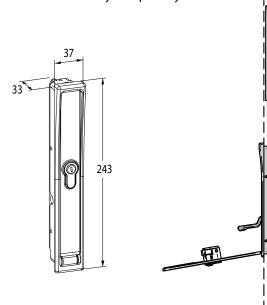


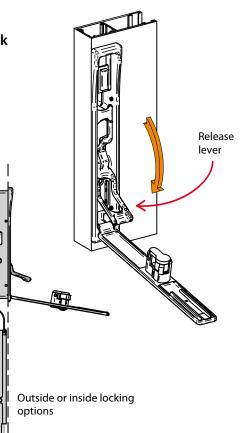
SLIM37-IN

Aluminium security box in-wall with break release and push button

- Hole 30 x 235 mm

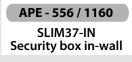
- Recessed mounting
- Material: zama (zinc alloy)
- Electrical connection in accordance with the three-way terminal block
- Lock: made in Italy european cylinder





<u>cylinder</u> PREFER





#### www.abexo.tech



### **CR2032**

CR2032 3V battery for EGO transmitter brand: "Maxell"

minimum pack and its multiples: 25 pcs



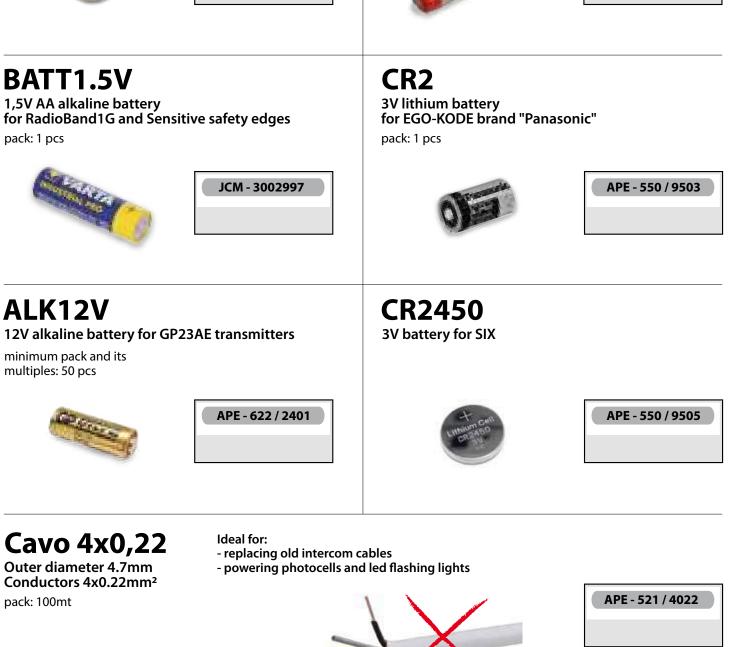


**BATT3.6V** 

3.6V Lithium battery for Radioband3 pack: 1 pcs



JCM-3004484



- **Technical characteristics**
- Double-insulation CE EN50575:2014
- Operating temperature: fixed pose: -40°C + 70°C
- Minimum radius of curvature: 5 times the diameter
- Insulation voltage Uo=400V
- Mobile pose: -10°C + 60°C
- Operating voltage Uo/U: 100/100V
- BBFlex sheathing resistant to oils and UV rays



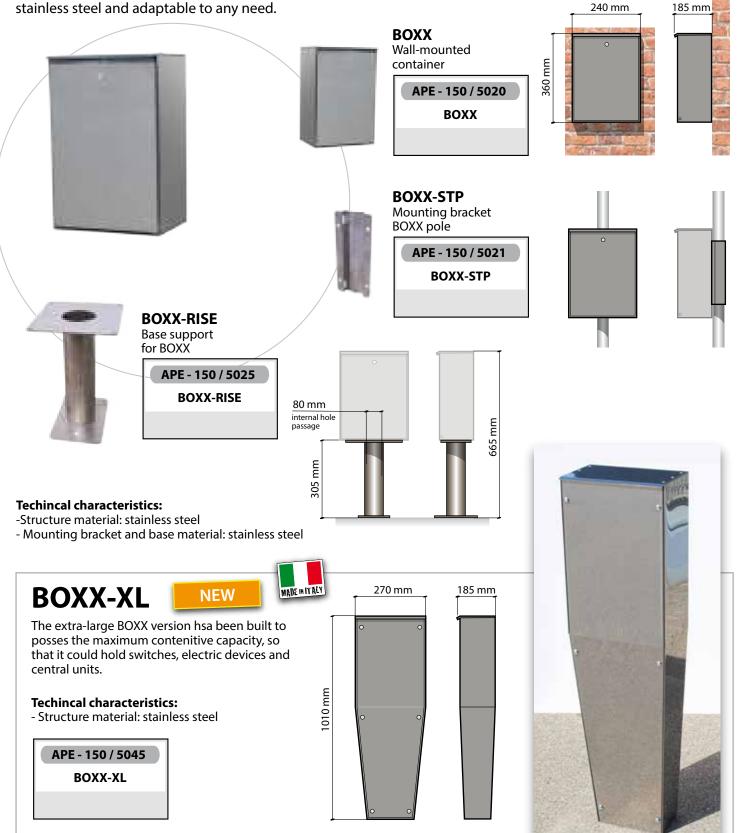
#### Devices and mechanical accessories/ Series of enclosures for stainless steel electronic control units

### BOXX





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.







#### 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 guarantee 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

out 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

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.

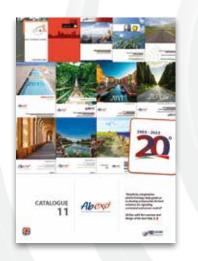
Notes

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