







IN AN INNOVATIVE COMPANY YOU DON'T FIND COMMON PEOPLE...

AN INVENTOR DOESN'T DESIGN COMMON PRODUCTS...

BAGLEM BELIVES THAT EVERITHING MUST BE SPECIAL.



BAGLEM® LIGHT LED is a trademark that was registered by MR di Balzarotti Ambrogio, company that since 1971 manufactures electrical panels for industrial automation, windings for the industry, single-phase and three-phase transformers, auto-transformers, reactors and electromagnets. Producing electrical panels for controlling of lighting devices, MR noticed the need of reliable lighting systems for the obstacle signalling.

To satisfy this demand the Owner of Baglem srl came up with a new modular system that allows emitting an ICAO compliant obstacle light also in backup mode. This patented solution is the beginning of the development of a series of innovative products. Due to the high quality standards and capability to satisfy client's needs by offering ad hoc solutions and with competitive prices, our lights are requested also in places of installation with the most difficult environmental conditions.

Now Baglem srl, after the success with obstacle lights, is expanding its business in the aviation lighting field and has created a complete range of visual aids for heliports.

This products also are having success and are appreciated for quality and easy installation and Baglem will follow with creating new innovative products and by increasing the ability to satisfy the requirements of the customers without forgetting the importance of the Regulations.







## Low intensity aviation obstacle light



Baglem®light led low Intensity Obstruction Light according to ICAO - Annex 14 and FAA is used to signal objects with a height of less then 45 mt above ground level, emits a beam of light with a 360° irradiaton angle of Aeronautic Red color light with steady burning or flashing light.

Based on LED technology it ensures long lifetime and low consumption and avoids to face overheating problems. The PCB made up of 6 leds with 2 circuits ensures, in case of failure of one led, to have at least 50% of the light intensity working. Degree of protection IP68 with aluminium base and cover that protects the glass or polycarbonate form dust, dirt and snow.

#### BGL-L810S0R10

Single led light ICAO type A Red light > 10 cd. 12, 24, 48 VDC

#### **BGL-L810S0R20**

Single led light ICAO type B Red light > 32 cd. 12, 24, 48 VDC

#### **BGL-L810S0R30**

Single led light ICAO type E Red light > 50 cd. 12, 24, 48 VDC

#### **BGL-L810S5R10**

Single led light ICAO type A Red light > 10 cd. 230 VAC

#### BGL-L810S5R20

Single led light ICAO type B Red light > 32 cd. 230 VAC

#### **BGL-L810S5R30**

Single led light ICAO type E Red light > 50 cd. 230 VAC



#### ICAO COMPLIANCE

ICAO Annex 14 vol. 1, 7th edition, July 2016, Chapter 6: Low intensity type A, B, E

#### 100% MADE IN ITAL

Baglem® light led products are designed, assembled and tested in Italy from our skilled technicans.

#### PATENTED PRODUCT

Baglem® light led lights take advantage from the patented modular system.



## Low intensity aviation obstacle light



#### ICAO COMPLIANCE

ICAO Annex 14 vol. 1, 7th edition, July 2016, Chapter 6: Low intensity type C, D

#### 100% MADE IN ITALY

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#### PATENTED PRODUCT

Baglem® light led lights take advantage from the patented modular system.

Baglem®light led low Intensity Obstruction Light according to ICAO - Annex 14 and Airside safety Directive N° 14/2018 low intensity obstacle lights type C shall be displayed on veichles and other mobile objects excluding aircraft. Low intensity obstacle lights type D shall be displayed on follow-me veichles. The light emits a beam with a 360° irradiaton angle of Amber color with flashing light.

Based on LED technology it ensures long lifetime and low consumption and avoids to face overheating problems. The PCB made up of 6 leds with 2 circuits ensures, in case of failure of one led, to have at least 50% of the light intensity working. Degree of protection IP68 with aluminium base and cover that protects the glass or polycarbonate form dust, dirt and snow.

#### BGL-L810M1Y41

Flashing led light ICAO type C Amber light > 40 cd. 12, 24 VDC Magnetic base

#### **BGL-L810M1Y61**

Flashing led light ICAO type D Amber light > 200 cd. 12, 24 VDC Magnetic base

#### BGL-L810P1Y41

Flashing led light ICAO type C Amber light > 40 cd. 12, 24 VDC Fixed plate

### BGL-L810P1Y61

Flashing led light ICAO type D Amber light > 200 cd. 12, 24 VDC Fixed plate





## Low intensity aviation obstacle light



Baglem®light led low Intensity Obstruction Light according to ICAO - Annex 14 and FAA is used to signal objects with a height of less then 45 mt above ground level, emits a beam of light with a 360° irradiaton angle of Aeronautic Red color light with steady burning or flashing

Based on LED technology it ensures long lifetime and low consumption and avoids to face overheating problems. The PCB made up of 6 leds with 2 circuits ensures, in case of failure of one led, to have at least 50% of the light intensity working. Degree of protection IP68 with aluminium base and cover that protects the glass or polycarbonate form dust, dirt and snow.

#### **BGL-L810D0R10**

Dual led light ICAO type A Red light > 10 cd. 12, 24, 48 VDC

#### **BGL-L810D0R20**

Dual led light ICAO type B Red light > 32 cd. 12, 24, 48 VDC

#### **BGL-L810D0R30**

Dual led light ICAO type E Red light > 50 cd. 12, 24, 48 VDC

#### **BGL-L810D5R10**

Dual led light ICAO type A Red light > 10 cd. 230 VAC

#### **BGL-L810D5R20**

Dual led light ICAO type B Red light > 32 cd. 230 VAC

#### **BGL-L810D5R30**

Dual led light ICAO type E Red light > 50 cd. 230 VAC

#### ICAO COMPLIANCE

ICAO Annex 14 vol. 1, 7th edition, July 2016, Chapter 6: Low intensity type A, B, E

#### 100% MADE IN ITALY

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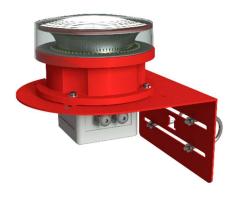
#### PATENTED PRODUCT

Baglem® light led lights take advantage from the patented modular system.





## Medium intensity aviation obstacle light



Baglem medium Intensity Obstruction Light according to ICAO - Annex 14 and FAA is used to signal objects with a height 45 mt to a hight less then 150 mt above ground level, emits a beam of light with a 360° irradiaton angle of Aeronautic Red color light with steady burning or flashing light.

Based on LED technology it ensures long lifetime and low consumption and avoids to face overheating problems. Degree of protection IP 65 anti-UV cover and aluminium housing.

#### **BGL-L864S0R0**

Single led light ICAO type B Red light > 2000 cd. 12, 24, 48 VDC

#### BGL-L864S0RF

Single led light ICAO type C Red light > 2000 cd. 12, 24, 48 VDC

### BGL-L864S5R0

Single led light ICAO type B Red light > 2000 cd. 230 VAC

#### BGL-L864S5RF

Single led light ICAO type C Red light > 2000 cd. 230 VAC

type B,C.

Based on single chip computer control, automatic identification sync signal.

ICAO Annex 14 vol. 1, 7th edition,

July 2016, Chapter 6: Low intensity

Same power supply voltage with synchronous signal, integrated in power supply cable, eliminate the damage by error installation caused.

Used the photosensitive probe fit for the natural light spectrum curve, anatomic control light intensity level.

The circuit of the light has surge protection, suitable also for harsh environment.







## Medium intensity aviation obstacle light



Baglem medium Intensity Obstruction Light according to ICAO - Annex 14 and FAA is used to signal objects with a height 45 mt to a hight less then 150 mt above ground level, emits a beam of light with a 360° irradiaton angle of Aeronautic Red color light with steady burning or flashing light.

Based on LED technology it ensures long lifetime and low consumption and avoids to face overheating problems. Degree of protection IP 65 anti-UV cover and aluminium housing.



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#### BGL-L864D0R0

Dual led light ICAO type B Red light > 2000 cd. 12, 24, 48 VDC

#### **BGL-L864D0RF**

Dual led light ICAO type C Red light > 2000 cd. 12, 24, 48 VDC

#### BGL-L864D5R0

Dual led light ICAO type B Red light > 2000 cd. 230 VAC

### **BGL-L864D5RF**

Dual led light ICAO type C Red light > 2000 cd. 230 VAC

#### BGL-L865-6D0W0

Dual led light ICAO type A
Day White light > 20000 cd.
Night White light > 2000 cd.
12, 24, 48 VDC

#### **BGL-L864-5D0RW0**

Dual led light ICAO type A+B Day White light > 20000 cd. Night Red light > 2000 cd. 12, 24, 48 VDC

### BGL-L865-6D5W0

Dual led light ICAO type A
Day White light > 20000 cd.
Night White light > 2000 cd.
230 VAC

#### **BGL-L864-5D5RW0**

Dual led light ICAO type A+B Day White light > 20000 cd. Night Red light > 2000 cd. 230 VAC



ICAO Annex 14 vol. 1, 7th edition,

July 2016, Chapter 6: Low intensity

Based on single chip computer

control, automatic identification

Same power supply voltage with

synchronous signal, integrated in

power supply cable, eliminate the

Used the photosensitive probe fit for the natural light spectrum

damage by error installation

curve, anatomic control light

The circuit of the light has surge

protection, suitable also for harsh

type B,C.

sync signal.

caused.

intensity level.

environment.

## Control panel for obstacle lighting systems

Baglem®light led control panel is used to

monitor the state of operation of the lights and, in case of failure, activates the backup mode, the fault alarm can be local and/or remote. (Optional SMS alarm transmission)This product boasts an extreme simplicity of use and a great economic advantage thanks to the dusk sensor that allows you to turn on and off lights automatically, eliminating the waste of energy and the use of personnel. It can be powered from a landline or alternative energy. The control panel is also able to work with both power supplies using the fixed network simultaneously for operating and charging the battery packs, if the main supply

is interrupted, it will work thanks to batteries

(UPS) until reset the fixed network.



#### BGL-M3131210322

Folded and welded from a cold-pressed sheet steel plate, all parts are pre-treated with iron phosphate, demineralised and protected by an epoxy-polyester powder-structure coating in RAL7035. The door is mounted using safety pins and the hinges are hidden and have a foamed polyurethane seal. High degree of protection and impact resistance IK10 according to IEC 60529 standards.

#### BGL-I3131210322

AISI 304 stainless steel (Wnr 1.4301) enclosure with hinged solid door. Door opening: 145° with hinges on the left. Internal mounting plate 25/10 FeZn. IP 66 protection rating. The body front of the enclosure is a double-edged rain gutter to allow water to drain. The door is mounted using safety pins and the hinges are hidden and have a foamed polyurethane seal.

#### BGL-P3131210322

Fibreglass reinforced polyester, Halogen free, RAL 7035, Protection degree: IP 66, Impact resistance: IK10 20J, Self-extinguishable960°, Double isolation according to UNE-EN 60439-1, IEC60439-1, Thermic class E 150°. The door is mounted using safety pins and the hinges are hidden and have a foamed polyurethane seal.



#### REFERENCE STANDARDS

IEC 61439-1; CEI-EN 61439-2; CEI-EN 60204-1

#### 100% MADE IN ITALY

Baglem® light led products are designed, assembled and tested in Italy from our skilled technicans.

#### ADDITIONAL OPTIONS

The system Baglem® Lights
Synchronizer is based on the
reception of UTC from the satellite
system GPS (Global Positioning
System) with an accuracy in the
order of milliseconds. Virtually an
infinite number of signaling
systems Baglem®, provided by
Baglem® Lights Synchronizer,
without physical connection of
each other are able to activate the
lights in a synchronized manner
with a time lag, between all of
them, less than one millisecond.



## Solar kits for obstacle lighting systems

#### **BGL-QPMPF010S**

Solar control panel 10 W

Single low intensity obstacle light

### **BGL-QPMPF015S**

Solar control panel 15 W

Single low intensity obstacle light

#### **BGL-QPMPF020S**

Solar control panel 20 W

Single low intensity obstacle light

#### REFERENCE STANDARDS

IEC 61439-1 ; CEI-EN 61439-2 ; CEI-EN 60204-1

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#### ADDITIONAL OPTIONS

The system Baglem® Lights
Synchronizer is based on the
reception of UTC from the satellite
system GPS (Global Positioning
System) with an accuracy in the
order of milliseconds. Virtually an
infinite number of signaling
systems Baglem®, provided by
Baglem® Lights Synchronizer,
without physical connection of
each other are able to activate the
lights in a synchronized manner
with a time lag, between all of
them. less than one millisecond.

### **BGL-QPMPF010D**

Solar control panel 10 W

Double low intensity obstacle light

#### **BGL-QPMPF015D**

Solar control panel 15 W

Double low intensity obstacle light

#### **BGL-QPMPF020D**

Solar control panel 20 W

Double low intensity obstacle light





### **ON REQUEST**

Solar control panel 20-50-100 W Single-Double low intensity obstacle light



Solar control panel 20-50-100 W Medium intensity obstacle light





Baglem®light led solar system does not need an external power. A photovoltaic panel and a battery group supply power to the system. System specially designed for low power consumption and long battery life. System operates under the control of photocell relay, so it automatically turns the system on when ambience gets dark and rums it off when the ambience gets lighten. The compact design version has panel, battery and lamp included in a compact robust box. You only need to turn on the switch to operate the system.



## Inset omnidirectional tlof lights



ICAO COMPLIANCE

ICAO Annex 14 vol. II, 4th edition, July 2013,

#### 100% MADE IN ITALY

Baglem® light led products are designed, assembled and tested in Italy from our skilled technicans.

### **TOP QUALITY**

The inset lamp is tested and certified by third parties to guarantee the high quality that allows to avoid infiltrations and other defects found on this type of products currently on the market.

Baglem® light led inset lights for TLOF and FATO areas are used as steady burning approach lights, final approach and take-off lights, aiming point lights and perimeter lights.

the omnidirectional light source is mounted in the aluminum body with lower cap in oxidized aluminum casting and lens with breaking power at 2 Ton. it is complete of gasket and mechanically bound to the cap by means of a stainless steel lens ring, the degree of protection is IP65.

The inset lamp is supplied with a circular bracket that allows an easy and fast installation. Based on LED technology it ensures long lifetime and low consumption and avoids to face overheating problems. The PCB made up of 6 leds with 2 circuits ensures, in case of failure of one led, to have at least 50% of the light intensity working.

### BGL-TLOFS1G000

Green light > 60 cd. 12, 24, 48 VDC

#### **BGL-TLOFS1Y000**

Yellow light > 60 cd. 12, 24, 48 VDC

#### **BGL-TLOFS1W000**

White light > 350 cd. 12, 24, 48 VDC

#### **BGL-TLOFS1B000**

Blue light > 32 cd. 12, 24, 48 VDC

#### **BGL-TLOFS5G000**

Green light > 60 cd. 230 VAC

#### **BGL-TLOFS5Y000**

Yellow light > 60 cd. 230 VAC

#### **BGL-TLOFS5W000**

White light > 350 cd. 230 VAC

### **BGL-TLOFS5B000**

Blue light > 32 cd. 203 VAC





## Overground omnidirectional fato lights



The **fato** perimeter lights must be placed without blinding the pilots in flight and the staff who works on that area. The lights for the diffused illumination of **tlof** area must not exceed the height of 25 cm if located within the security area of the heliport or within the area that must be free from obstacles. The arrangement and orientation of the lights must be such as to minimize shadows. Baglem® light led fato lights ar every easy and fast to install overground with bar bracket. The light composed of a body made of Aluminum with a low level of copper, and a resistant borosilicate glass part with a high mechanical resistance and high temperature resistance. Degree of protection IP68. Based on LED technology it ensures long lifetime and low consumption and avoids to face overheating problems. The PCB made up of 6 leds with 2 circuits ensures, in case of failure of one led, to have at least 50% of the light intensity working.

#### BGL-FATOS1G000

Green light > 60 cd. 12, 24, 48 VDC

#### **BGL-FATOS1Y000**

Yellow light > 60 cd. 12, 24, 48 VDC

#### **BGL-FATOS1W000**

White light > 350 cd. 12, 24, 48 VDC

#### **BGL-FATOS1B000**

Blue light > 32 cd. 12, 24, 48 VDC

#### **BGL-FATOS5G000**

Green light > 60 cd. 230 VAC

### **BGL-FATOS5Y000**

Yellow light > 60 cd. 230 VAC

#### **BGL-FATOS5W000**

White light > 350 cd. 230 VAC

#### **BGL-FATOS5B000**

Blue light > 32 cd. 203 VAC

## ICAO COMPLIANCE

ICAO Annex 14 vol. II, 4th edition, July 2013,

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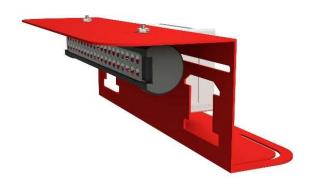
## **TOP QUALITY**

The overground lamp is tested and certified by third parties to guarantee the high quality that allows to avoid infiltrations and other defects found on this type of products currently on the market.





## **Floodlights**



#### BGL-FLOO6000

White light 6000 lumen 12, 24, 48 VDC

#### BGL-FLOO8000

White light 8000 lumen 12, 24, 48 VDC

#### **BGL-FLOO60002**

White light 6000 lumen 230 VAC

#### BGL-FLOO80002

Blue light > 32 cd. 230 VAC

## ICAO COMPLIANCE

ICAO Annex 14 vol. II, 4th edition, July 2013,

#### 100% MADE IN ITALY

Baglem® light led products are designed, assembled and tested in Italy from our skilled technicans.

### **KEY FEATURES**

low power consumption and long life light source;

easy way for mounting and simple cable plug and play connection; resistance to corrosion.

Baglem® light led floodlights are used, besides the perimeter lights, to illuminate touchdown and lift - off area in compliance with ICAO. The height doesn't exceed 25 cm from ground, the special design allows to avoid glare to pilots in flight or to personnel working on the area. Projectors have to be installed outside the perimeter of the touchdown and lift-off area. They can be fixed on a special base by means of screws or bolts, or directly to the ground and must be carefully oriented, in order to achieve the most effective spreading of the light. Degree of protection IP67.





# Adjustable floodlights



Baglem® light led adjustable floodlights are used, besides the perimeter lights, to illuminate touchdown and lift - off area in compliance with ICAO. The height doesn't exceed 25 cm from ground, the special design allows to avoid glare to pilots in flight or to personnel working on the area. It is possible to adjust the lights 90° right and 90° left horizontally and 27° vertically. Projectors have to be installed outside the perimeter of the touchdown and lift-off area. They can be fixed on a special base by means of screws or bolts, or directly to the ground and must be carefully oriented, in order to achieve the most effective spreading of the light. Degree of protection IP67.

#### **BGL-FLOO0SL00**

White light
Single – 1 light source
12, 24, 48 VDC

#### **BGL-FLOO0DL00**

White light

Double – 2 light sources

12, 24, 48 VDC

#### **BGL-FLOO5SL00**

White light Single – 1 light source 230 VAC

#### **BGL-FLOO5DL00**

White light

Double – 2 light sources

230 VAC

## ICAO COMPLIANCE

ICAO Annex 14 vol. II, 4th edition, July 2013,

## 100% MADE IN ITALY

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#### **KEY FEATURES**

low power consumption and long life light source;

easy way for mounting and simple cable plug and play connection; resistance to corrosion





## Heliport beacon



#### **BGL-LHB0000**

White light >2500 cd Flash rate "H Morse" 230 VAC.

### ICAO COMPLIANCE

ICAO Annex 14 vol. II, 4th edition, July 2013,

#### **KEY FEATURES**

IZOD notch impact strength: 90
Working temperature can be 130°
Light weight, water tightness,
corrosion resistant, long life light
source.

Baglem® light led heliport beacon should be provided at a heliport where long-range visual guidance is considered necessary and is not provided by other visual means; or when identification of the heliport is difficult due to surrounding lights. The light is emitting repeated series of equispaced short duration white flashes in the format of the morse letter 'H'. Degree of protection IP65.

## Rotating beacon

#### BGL-L802-520

White and Green light Or White and Yellow light 230 VAC.

#### BGL-L802-530

White, Yellow and Green light 230 VAC.







## Flight path alignment guidance lighting system



#### BGL-GPI800YGR

Top beam (yellow) indicates a too high altitude of approach.

Center beam (green) is the correct altitude Lower beam (red) is a too low altitude. By staying within the green light beam, the correct slope is maintained to touchdown. 230 VAC

#### ICAO COMPLIANCE

ICAO Annex 14 vol. II, 4th edition, July 2013,

#### 100% MADE IN ITALY

Baglem® light led products are designed, assembled and tested in Italy from our skilled technicans.

### **KEY FEATURES**

low power consumption and long life light source;

easy way for mounting and simple cable plug and play connection; resistance to corrosion.

#### BGL-L881HAPI00

Flashing Green Light: Helicopter above the optimal approach slope (too high)

Fix Green Light: Helicopter on the slope

Fix Red Light: Helicopter slightly below the optimal slope (slightly too low)

Flashing Red Light: Helicopter below the optimal slope (too low)

230 VAC

Baglem® light led fight path alignment guidance systems use a LED lamp of very high intensity and has a rated life of at least 50,000 hours. The mechanical part is folded and welded from a cold-pressed sheet steel plate, all parts are pre-treated with iron phosphate, demineralised and protected by an epoxy-polyester powder-structure coating in RAL3020. Degree of protection IP67.









## Wind direction indicator



The customer can choose between Unlighted, Internally Lighted, Externally Lighted or Solar Internally Lighted versions. And we add the Red obstacle light on top if required. Our wind direction indicators are sold with Full LED solution and low power consumption. Tilting mast in galvanized and powder coated steel sheet, complete with base flange, rotating Frame and Hoop.

#### **BGL-MAN02R6030**

2 mt total heigh Internally lighted 24 VDC

#### BGL-MAN04R6030

4 mt total heigh Internally lighted 24 VDC

#### BGL-MAN06R6030

6 mt total heigh Internally lighted 24 VDC

#### **BGL-MAN02R60302**

2 mt total heigh Internally lighted 230VAC

### **BGL-MAN04R60302**

4 mt total heigh Internally lighted 230 VAC

### **BGL-MAN06R60302**

6 mt total heigh Internally lighted 230 VAC

### BGL-MAN240

L. 240 cm ; Ø60 ø 30

White /Red Ripstop textile 80 gr

### **BGL-MAN240160**

L. 240 cm; Ø60 ø 30 White /Red\_Polyester 160 ø

White /Red Polyester 160 gr









ICAO COMPLIANCE

July 2013,

ICAO Annex 14 vol. II, 4th edition,

100% MADE IN ITALY

Baglem® light led products are

Italy from our skilled technicans.

designed, assembled and tested in

# Control panel for heliport lighting systems



#### BGL-QGM00007

Metal RAL 7032

7 circuits

230 Vac / 400 Vac / on

request

BGL-QGM00010

Metal RAL 7032

10 circuits

230 Vac / 400 Vac / on

request

The framework manages autonomously the heliport lighting system by controlling the state of operation and protecting the various circuits. The electrical circuits of power light line are double to ensure, in case of failure, that the second circuit makes the system working at least to 50%. In charge of each circuit are installed thermal magnetics and circuit breaker to protect it against short circuits or ground faults.

## REFERENCE STANDARDS

The Legislation 2006/95/CE(low voltage regulation),The Legislation EMC 2004/108/CE(electromagnetic compatibility

Regulation),93/68/CEE(CE marking Regulation),harmonized Regulation CEI EN 61439-1/CEI EN 61439-2 is applicated

#### 100% MADE IN ITALY

Baglem® light led products are designed, assembled and tested in Italy from our skilled technicans.

### BGL-L854000

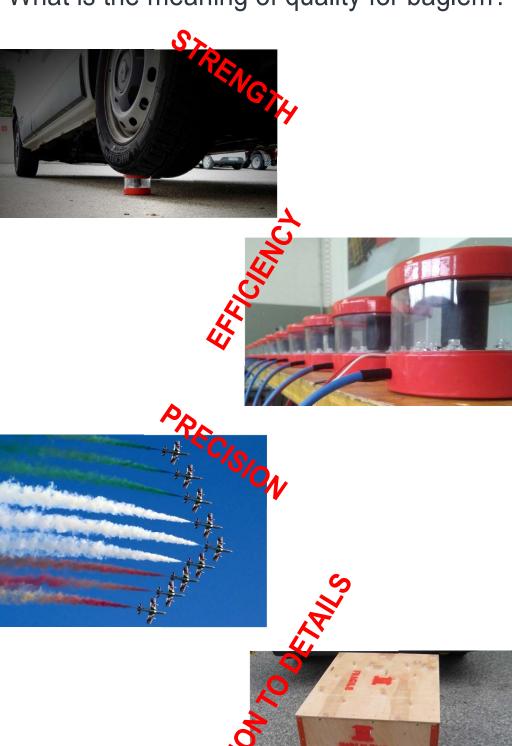
AIRSWITCH RCM 854 radio. (It can be incorporated in the control panel)







# What is the meaning of quality for baglem?















DON'T COMPLAIN ABOUT THE QUALITY, CHOOSE BAGLEM!

## BAGLEM SRL

Via Plan Paluz, 3 33017 Tarcento (UD) - ITALY

Via Dante, 49 20092 Cinisello Balsamo (MI) - ITALY

> Tel. +39 0432 1446155 E.mail: info@baglem.com

> > www.baglem.com