

DeltaBox

HIGHLIGHTING INNOVATION



PRODUCT CATALOG

AIRCRAFT WARNING LIGHTS
& AIRFIELD EQUIPMENT



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CONTROL PANELS & SAFEBOX				
Control Panel	Page	Input	Output	Maximum Number of Lights
AAMB-10AF-75W	50	230V	48V	25 LBIA or 12 LBIB or 1LMIB/C
AAMB-10AF-500W	50	230V	48V	160 LBIA or 80 LBIB or 1LMIA or 6LMIB/C
AAMB-10AF-1000W	50	230V	48V	3 LMIA or 3LMIAB or 12 LMIB/C
AAMM-10AF	50	230V	230V	TO BE DETERMINED ACCORDING TO THE INSTALLATION
AA-A400CO48-10AF	50	400V	48V	1 LMIA or 1 LMIAB or 6 LMIB or C

SAFEBOX (Power Supply Cabinet + 12 hours back-up)	Page	Input / Output	Number of batteries 12V	Battery capacity	Maximum Number of Lights
SBMCBI4-10	52	230V/48V	4	7Ah	10 LBIA or 4 LBIB
SBMCBI8-20	52	230V/48V	4	12Ah	20 LBIA or 8 LBIB
SBMCM1	52	230V/48V	4	24Ah	1 LMIA or 4 LMIB
SBMCM2	52	230V/48V	8	24Ah	2 LMIA or 8 LMIB
SBMCM3	52	230V/48V	4	100Ah	4 LMIA or 16 LMIB
SBMMMI1	52	230V/230V	4	24Ah	1 LMIA or 4 LMIB
SBMMMI2	52	230V/230V	8	24Ah	2 LMIA or 8 LMIB
SBMMMI3	52	230V/230V	4	100Ah	4 LMIA or 16 LMIB

OBSTRUCTION LIGHTS															
References		Luminous Intensity		Power Supply					Version			Horizontal Beam Spread		Available options	
Low Intensity Lights	Page	Type A: 10 cd	Type B: 32 cd	12V	24V	48V	230V	Solar	Simple	Twiny	Atex	360°	180°	Photocell	Dry Contact
LBIA00CC	18			•	•	•			•			•			
LBIA01AC	18				•				•			•			✓
LBIA11AC	18				•				•			•		✓	✓
LBIA01BC	18					•			•			•			✓
LBIA11BC	18					•			•			•		✓	✓
LBIA00MC	18						•		•			•			✓
LBIA01MC	18						•		•			•			✓
LBIA11MC	18						•		•			•		✓	✓
LBIA00CX	28			•	•	•			•		•	•			
LBIA11EX	28					•			•		•	•		✓	✓
LBIA00MX	28						•		•		•	•		✓	✓
LBIA11MX	28						•		•		•	•		✓	✓
LBIB00DC	20				•	•			•			•			
LBIB01AC	20				•				•			•			✓
LBIB11AC	20				•				•			•		✓	✓
LBIB01BC	20					•			•			•			✓
LBIB11BC	20					•			•			•		✓	✓
LBIB00MC	20						•		•			•			✓
LBIB01MC	20						•		•			•			✓
LBIB11MC	20						•		•			•		✓	✓
LBIBTWCB	22					•			•			•		✓	✓
LBIBTWMB	22						•		•			•		✓	✓

References		Luminous Intensity		Power Supply					Version			Horizontal Beam Spread		Available options	
Low Intensity Lights	Page	Type A: 10 cd	Type B: 32 cd	12V	24V	48V	230V	Solar	Simple	Twiny	Atex	360°	180°	Photocell	Dry Contact
SOLBIB10C	26								•	•		•		✓	
SOLBIB11C	26								•	•		•		✓	✓
SOLBIBTWC	28								•	•		•		✓	✓
LBIB00BX	28					•			•		•	•			
LBIB11BX	28					•			•		•	•		✓	✓
LBIB00MX	28						•		•		•	•			
LBIB11MX	28						•		•		•	•		✓	✓
Medium Intensity Lights	Page	Day: 20 000cd White	Night: 2 000cd Red	12V	24V	48V	230V	Solar	Simple	Twiny	Atex	360°	180°	Photocell	Dry Contact
LMIA01BB	32					•			•			•			✓
LMIA11BB	32					•			•			•		✓	✓
LMIA01MB	32						•		•			•			✓
LMIA11MB	32						•		•			•		✓	✓
LMIA01BB-180°	32					•			•				•		✓
LMIA11BB-180°	32					•			•				•	✓	✓
LMIA01MB-180°	32						•		•				•		✓
LMIA11MB-180°	32						•		•				•	✓	✓
SMIB01AB	34					•			•			•			✓
SMIB11AB	34					•			•			•		✓	✓
SMIB01BB	34					•			•			•			✓
SMIB11BB	34					•			•			•		✓	✓
SMIB01MB	34						•		•			•			✓
SMIB11MB	34						•		•			•		✓	✓
SMIB01AX	42					•			•		•	•			✓
SMIB11AX	42					•			•		•	•		✓	✓
SMIB01BX	42					•			•		•	•			✓
SMIB11BX	42					•			•		•	•		✓	✓
SMIB11MX	42						•		•		•	•		✓	✓
LMIC01BB	36					•			•			•			✓
LMIC11BB	36					•			•			•		✓	✓
LMIC01MB	36						•		•			•			✓
LMIC11MB	36						•		•			•		✓	✓
LMIC01BB-180°	36					•			•				•		✓
LMIC11BB-180°	36					•			•				•	✓	✓
LMIC01MB-180°	36						•		•				•		✓
LMIC11MB-180°	36						•		•				•	✓	✓
LMIAB01BB	38					•			•			•			✓
LMIAB11BB	38					•			•			•		✓	✓
LMIAB01MB	38						•		•			•			✓
LMIAB11MB	38						•		•			•		✓	✓
LMIAB01BB-180°	38					•			•				•		✓
LMIAB11BB-180°	38					•			•				•	✓	✓
LMIAB01MB-180°	38						•		•				•		✓
LMIAB11MB-180°	38						•		•				•	✓	✓
LMIAC01BB	40					•			•			•			✓
LMIAC11BB	40					•			•			•		✓	✓
LMIAC01MB	40						•		•			•			✓
LMIAC11MB	40						•		•			•		✓	✓
High Intensity Lights	Page	Day: WHITE FLASH Twilight: WHITE FLASH Night: WHITE FLASH		12V	24V	48V	230V	Solar	Simple	Twiny	Atex	360°	120°	Photocell	Dry Contact
LHIA-TF	46						•		•				•		
LHIB-TF	48						•		•				•		

HIGH VOLTAGE LINES MARKING & SIGNALING

Conductor Marking Light	Page	Cable Diameter (in mm)					Color
		7 to 13	14 to 21	22 to 29	30 to 36	37 to 40	
LBIA00HT	54	●	●	●	●	●	Red
LBIB00HT	54	●	●	●	●	●	Red

Warning Spheres	Page	Cable Diameter (in mm)					Color
		10 to 15	15 to 20	20 to 26	26 to 29	31 to 33	
WS60R-d07	56	●					Red
WS60R-d12	56		●				Red
WS60R-d18	56			●			Red
WS60R-d23	56				●		Red
WS60R-d29	56					●	Red
WS60W-d07	56	●					White
WS60W-d12	56		●				White
WS60W-d18	56			●			White
WS60W-d23	56				●		White
WS60W-d29	56					●	White
WS60O-d07	56	●					Orange
WS60O-d12	56		●				Orange
WS60O-d18	56			●			Orange
WS60O-d23	56				●		Orange
WS60O-d29	56					●	Orange

ICAO WIND DIRECTION INDICATORS (STNA)

References	Page	Mast Height				Mast Color		Windvane Diameter			Preform	Windsock		Lighting			Power Supply			Tiltable option
STNA Masts	Page	3m	4m	6m	7,40m	Red & White	Orange	60 cm	90 cm	100 cm	Included	Included	Length in Cm	Top-mast beacon	Windsock lighting	230V	6.6A	Solar		
STNABG60	60				●	●	Option	●											✓	
STNABG60E2L	60				●	●	Option	●					✓			●			✓	
STNABG60E6L	60				●	●	Option	●					✓			●			✓	
STNABG60ESL	60				●	●	Option	●					✓				●		✓	
STNABG60C2L	60				●	●	Option	●			✓	240	✓	✓		●			✓	
STNABG60C6L	60				●	●	Option	●			✓	240	✓	✓		●			✓	
STNABG60CSL	60				●	●	Option	●			✓	240	✓	✓			●		✓	
STNABG90	60				●	●	Option	●	●										✓	
STNABG90E2L	60				●	●	Option	●	●				✓			●			✓	
STNABG90E6L	60				●	●	Option	●	●				✓			●			✓	
STNABG90ESL	60				●	●	Option	●	●				✓				●		✓	
STNABG90C2L	60				●	●	Option	●	●		✓	360	✓	✓		●			✓	
STNABG90C6L	60				●	●	Option	●	●		✓	360	✓	✓		●			✓	
STNABG90CSL	60				●	●	Option	●	●		✓	360	✓	✓			●		✓	
STNABG100	60				●	●	Option		●										✓	
STNABG100E2L	60				●	●	Option		●				✓			●			✓	
STNABG100E6L	60				●	●	Option		●				✓			●			✓	
STNABG100ESL	60				●	●	Option		●				✓				●		✓	
STNABG100C2L	60				●	●	Option		●		✓	450	✓	✓		●			✓	
STNABG100C6L	60				●	●	Option		●		✓	450	✓	✓		●			✓	
STNABG100CSL	60				●	●	Option		●		✓	450	✓	✓			●		✓	

RUNWAY BEACONS

Portable Beacon	Page	Color(s)	Batteries
BPLBIAR	66	Red	1 x 12V 7Ah
BPLBIAB	66	White	1 x 12V 7Ah
BPLBIABL	66	Blue	1 x 12V 7Ah
BPLBIAR&B (and)	66	Red and Blue	1 x 12V 7Ah
BPLBIAR/B (or)	66	Red or Blue	1 x 12V 7Ah
BPLBIAV	66	Green	1 x 12V 7Ah
BPLBIAR&V (and)	66	Red and Green	1 x 12V 7Ah
BPLBIAR/V (or)	66	Red or Green	1 x 12V 7Ah
BPLBIAO	66	Orange	1 x 12V 7Ah
Mini Portable Beacon			
BPMLBIAR1	66	Red	1 x 12V 1.2Ah
BPMLBIAR2	66	Red	2 x 12V 1.2Ah
BPMLBIAW1	66	White	1 x 12V 1.2Ah
BPMLBIAW2	66	White	2 x 12V 1.2Ah
BPMLBIAR/B1	66	Red and / or Blue	1 x 12V 1.2Ah
BPMLBIAR/B2	66	Red and / or Blue	2 x 12V 1.2Ah
BPMLBIAR/V1	66	Red and / or Green	1 x 12V 1.2Ah
BPMLBIAR/V2	66	Red and / or Green	2 x 12V 1.2Ah
Truncated cones & dihedral beacons			
BPTRY	68	Yellow	
BPTRW	68	White	
BPDIEDRE	68	Red and White	
BR-COMP	68	Orange	

FAA WIND DIRECTION INDICATORS

References	Page	Mast Height		Mast Color		Windvane Diameter			Preform	Windsock	Lighting		Power Supply			Tiltable Option
FAA MASTS	Page	3m	6m	Red & White	Orange	45	60	90	Included	Included	Top-mast beacon	Windsock lighting	230V	6.6A	Solar	With
FAA3-BG45	62	●		Option	●	●			✓							✓
FAA3-BG45-E2L	62	●		Option	●	●			✓			✓	●			✓
FAA3-BG45-E6L	62	●		Option	●	●			✓			✓		●		✓
FAA3-BG45-ESL	62	●		Option	●	●			✓			✓		●		✓
FAA3-BG45-C2L	62	●		Option	●	●			✓	✓	✓	✓	●			✓
FAA3-BG45-C6L	62	●		Option	●	●			✓	✓	✓	✓		●		✓
FAA3-BG45-CSL	62	●		Option	●	●			✓	✓	✓	✓			●	✓
FAA3-BG60	62	●		Option	●	●			✓							✓
FAA3-BG60-E2L	62	●		Option	●	●			✓			✓	●			✓
FAA3-BG60-E6L	62	●		Option	●	●			✓			✓		●		✓
FAA3-BG60-ESL	62	●		Option	●	●			✓			✓		●		✓
FAA3-BG60-C2L	62	●		Option	●	●			✓	✓	✓	✓	●			✓
FAA3-BG60-C6L	62	●		Option	●	●			✓	✓	✓	✓		●		✓
FAA3-BG60-CSL	62	●		Option	●	●			✓	✓	✓	✓			●	✓
FAA3-BG90	62	●		Option	●	●		●	✓							✓
FAA3-BG90-E2L	62	●		Option	●	●		●	✓			✓	●			✓
FAA3-BG90-E6L	62	●		Option	●	●		●	✓			✓		●		✓
FAA3-BG90-ESL	62	●		Option	●	●		●	✓			✓			●	✓
FAA3-BG90-C2L	62	●		Option	●	●		●	✓	✓	✓	✓	●			✓
FAA3-BG90-C6L	62	●		Option	●	●		●	✓	✓	✓	✓		●		✓
FAA3-BG90-CSL	62	●		Option	●	●		●	✓	✓	✓	✓			●	✓
FAA6-BG45	62		●	Option	●	●			✓							✓
FAA6-BG45-E2L	62		●	Option	●	●			✓			✓	●			✓
FAA6-BG45-E6L	62		●	Option	●	●			✓			✓		●		✓
FAA6-BG45-ESL	62		●	Option	●	●			✓			✓			●	✓
FAA6-BG45-C2L	62		●	Option	●	●			✓	✓	✓	✓	●			✓
FAA6-BG45-C6L	62		●	Option	●	●			✓	✓	✓	✓		●		✓
FAA6-BG45-CSL	62		●	Option	●	●			✓	✓	✓	✓			●	✓
FAA6-BG60	62		●	Option	●	●		●	✓							✓
FAA6-BG60-E2L	62		●	Option	●	●		●	✓			✓	●			✓
FAA6-BG60-E6L	62		●	Option	●	●		●	✓			✓		●		✓
FAA6-BG60-ESL	62		●	Option	●	●		●	✓			✓			●	✓
FAA6-BG60-C2L	62		●	Option	●	●		●	✓	✓	✓	✓	●			✓
FAA6-BG60-C6L	62		●	Option	●	●		●	✓	✓	✓	✓		●		✓
FAA6-BG60-CSL	62		●	Option	●	●		●	✓	✓	✓	✓			●	✓
FAA6-BG90	62		●	Option	●	●		●	✓							✓
FAA6-BG90-E2L	62		●	Option	●	●		●	✓			✓	●			✓
FAA6-BG90-E6L	62		●	Option	●	●		●	✓			✓		●		✓
FAA6-BG90-ESL	62		●	Option	●	●		●	✓			✓			●	✓
FAA6-BG90-C2L	62		●	Option	●	●		●	✓	✓	✓	✓	●			✓
FAA6-BG90-C6L	62		●	Option	●	●		●	✓	✓	✓	✓		●		✓
FAA6-BG90-CSL	62		●	Option	●	●		●	✓	✓	✓	✓			●	✓

SIMPLE WIND DIRECTION INDICATORS

REFERENCES	Page	MAST HEIGHT				MAST COLOR		WINDVANE DIAMETER			PREFORM	WINDSOCK		LIGHTING			POWER SUPPLY			TILTABLE MAST
SIMPLE MASTS	Page	3m	4m	6m	7,40m			30	40	50	With	With	Length in Cm	Top-mast beacon	Windsock lighting	230V	6.6A	Solar	With	
MASBG30	64		●			White		●											✓	
MASBG40	64		●			White			●										✓	
MASBG50	64		●			White				●									✓	
MASFG30	64		●			White		●												
MASFG40	64		●			White			●											
MASFG50	64		●			White				●										

THE COMPANY



Delta-Box, the French manufacturer of aircraft warning lights, has been supplying beaconing systems for over 25 years.

Part of the Indelec Group since 2004, leaders in the design & manufacture of lightning protection systems; at Delta-Box we design and assemble our full range of beaconing at our production facility in Douai, in the north of France.

We manage in-house the development and production processes of our aircraft warning systems and associated software, which in turn allows us to innovate and propose alternative solutions.

All our products fully comply with the ICAO rules and are approved by the French Civil Aviation Authority.

DELTA BOX IN NUMBERS :

- Innovative SME into a Group of 200 employees
- Production facility of 1,000 m²
- Annual sales of €3,000,000 of which 50% is export
- Present in more than 80 countries through a network of agents and distributors
- More than 7,000 beaconing units shipped to 5 continents each year

Delta-Box's key strengths are in its recognised know-how, its reactivity and response to the technical and business needs of its clients.



AN INTERNATIONAL DIMENSION

EXPORT MARKET

 **50%**
of global turnover

 **Delivery**
in more than 80 countries

 **A network**
of local dealers



PERMANENT INVESTMENT

IN RESEARCH AND DEVELOPMENT

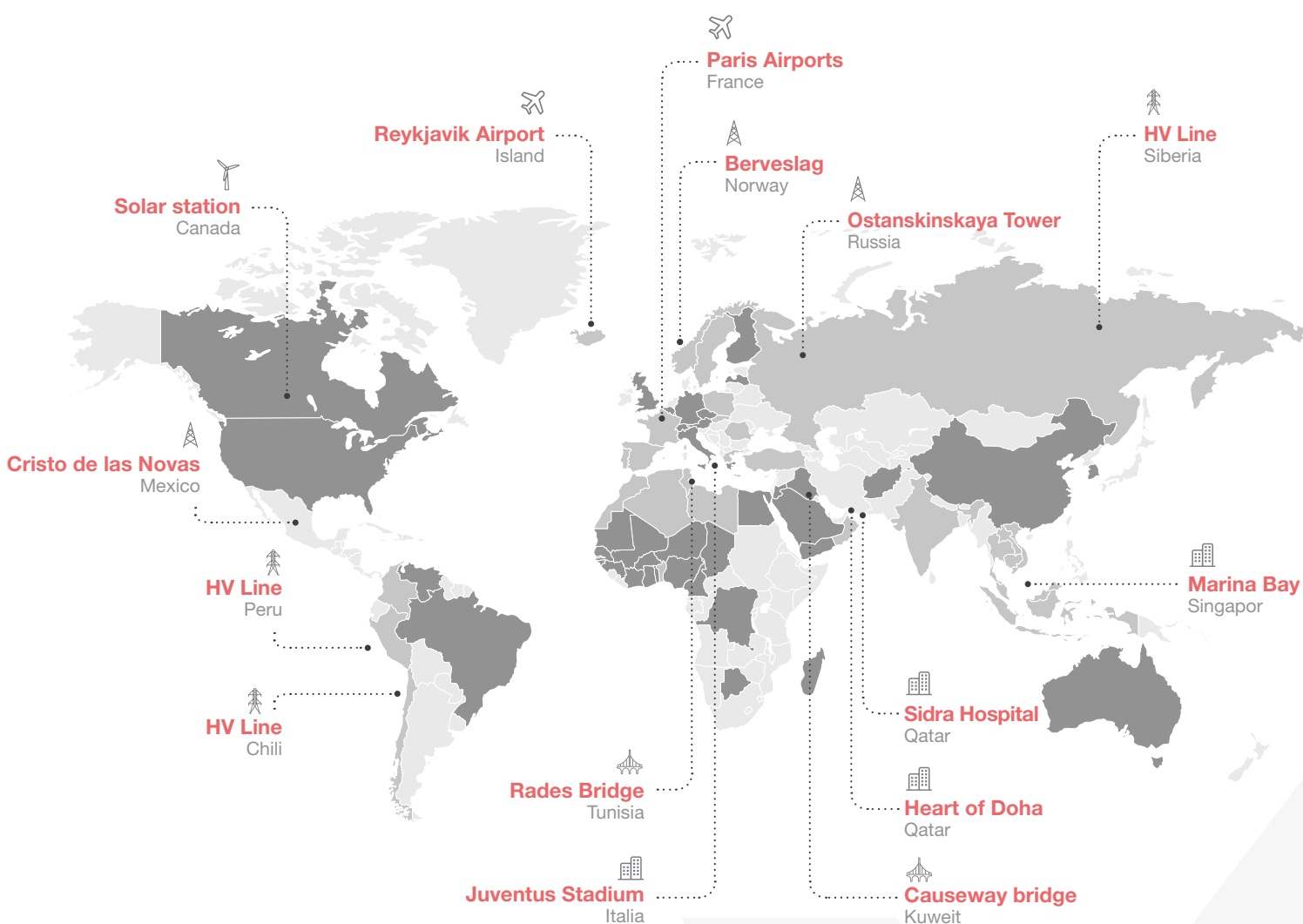
DELTA BOX's expertise in obstruction lighting systems is the result of more than 25 years' experience in development, manufacture and installation of its products and from resolving on-site and installation problems for its customers.

Pioneer in the use of LED technology, DELTA BOX has its own research and development team, as well as relationships with institutions involved in applied research. This enables the company to offer advanced state-of-the-art technology to its clients.

Our commercial and technical departments work together to provide customized solutions for each project that take account of the specific conditions and constraints.

In addition, we also provide broad expertise to customers regarding:

- wireless data communication,
- autonomous and safety power supplies such as battery, solar station, fuel cell...
- light-signaling devices,
- specific types of lighting.



SCOPES OF APPLICATION



Airport



Building



Stack



Structure



Wind Turbine



Pylon





HV Line



Crane

LEGENDE

-  References
-  Dealers

OBSTRUCTION LIGHTING
& NAVIGATION AIDS TO
WARN OBSTACLES



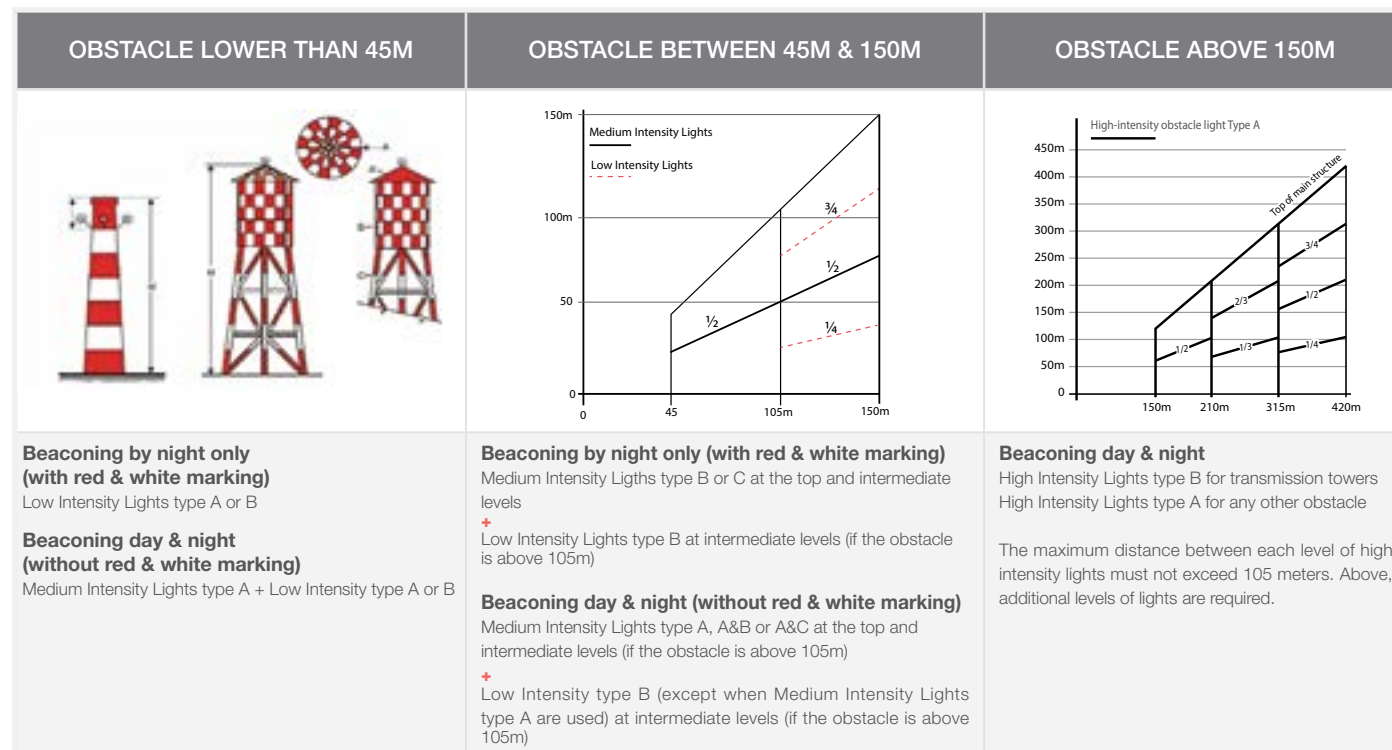
THE INTERNATIONAL CIVIL AVIATION ORGANISATION (ICAO)

RECOMMENDATIONS ON OBSTACLE WARNING

ANNEX 14 – CHAPTER 6 – 7TH EDITION, JULY 2016

GENERAL PRINCIPLES & RECOMMENDATIONS

- › All obstacles as per ICAO definition should be marked and/or lighted.
- › By day, the beaconing by lighting can replace the beaconing by marking.
- › By night, all obstacles must be beaconed with warning lights
- › The type of warning light depends on the size (height, width and length) and on the form of the object:
 - Low Intensity Lights for obstacles below 45 meters
 - Medium Intensity Lights for obstacles between 45 and 150 meters
 - High Intensity Lights for obstacles above 150 meters
- › The number and arrangements of low-, medium-, or high-intensity lights at each level to be marked shall be such that the object is indicated from every angle in azimuth.
- › Where a light is shielded in any direction by another part of the object that contributes to the definition of the obstacle, additional lights shall be provided, in such way to retain the general definition of the object to be lighted.



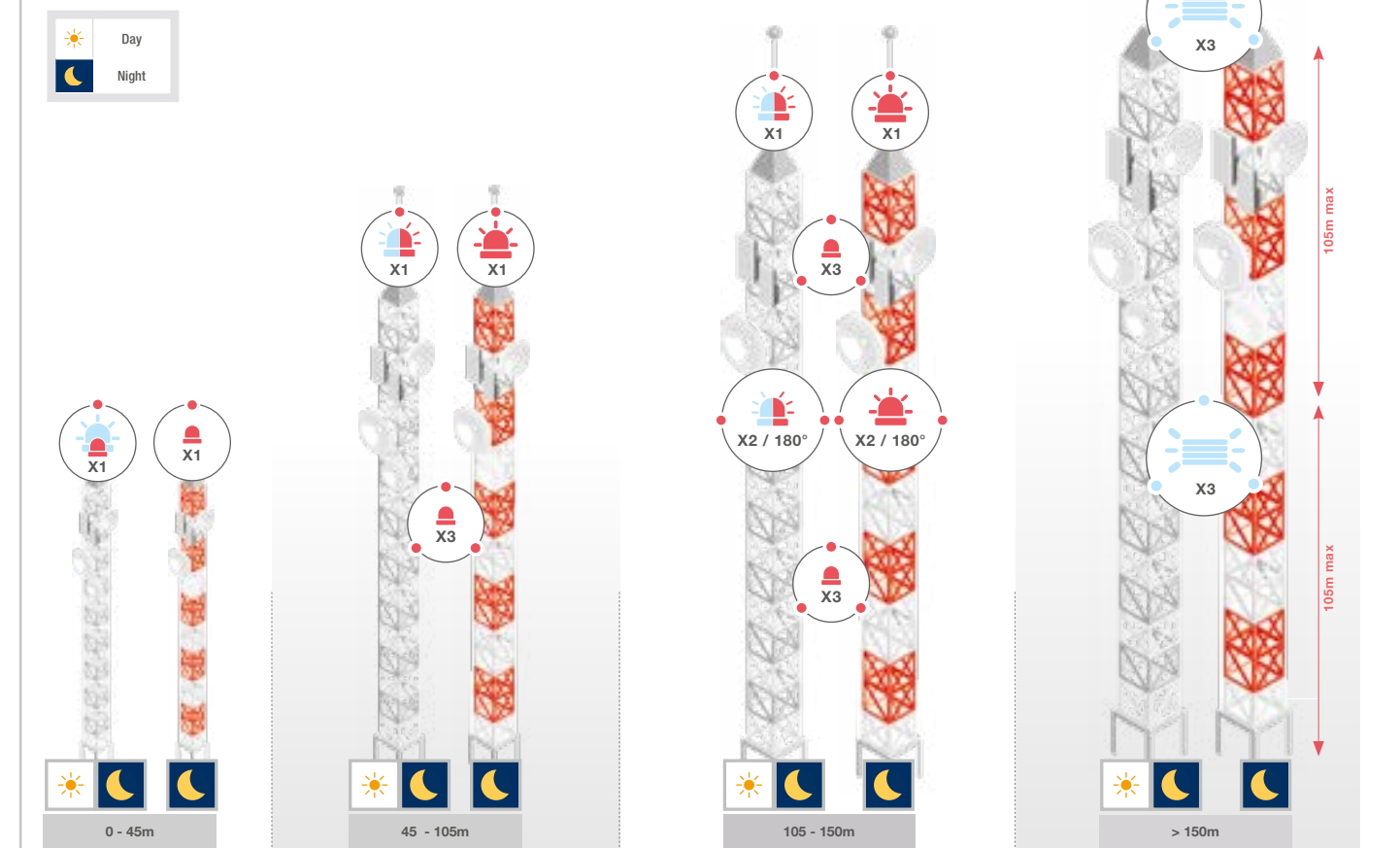
Type of Light	Color	Type of signal	Peak Intensity (Cd) at given background luminance			
			Day (Above à 500 cd/m ²)	Twilight (50-500 cd/m ²)	Night (Below à 50 cd/m ²)	
Low Intensity	Type A	Red	Steady	-	-	10
	Type B	Red	Steady	-	-	32
Medium Intensity	Type A	White	Flashing (20-60 fpm)	20 000	20 000	2 000
	Type B	Red	Flashing (20-60 fpm)	-	-	2 000
	Type C	Red	Steady	-	-	2 000
High Intensity	Type A	White	Flashing (20-60 fpm)	200 000	20 000	2 000
	Type B	White	Flashing (20-60 fpm)	100 000	20 000	2 000

LEGENDE

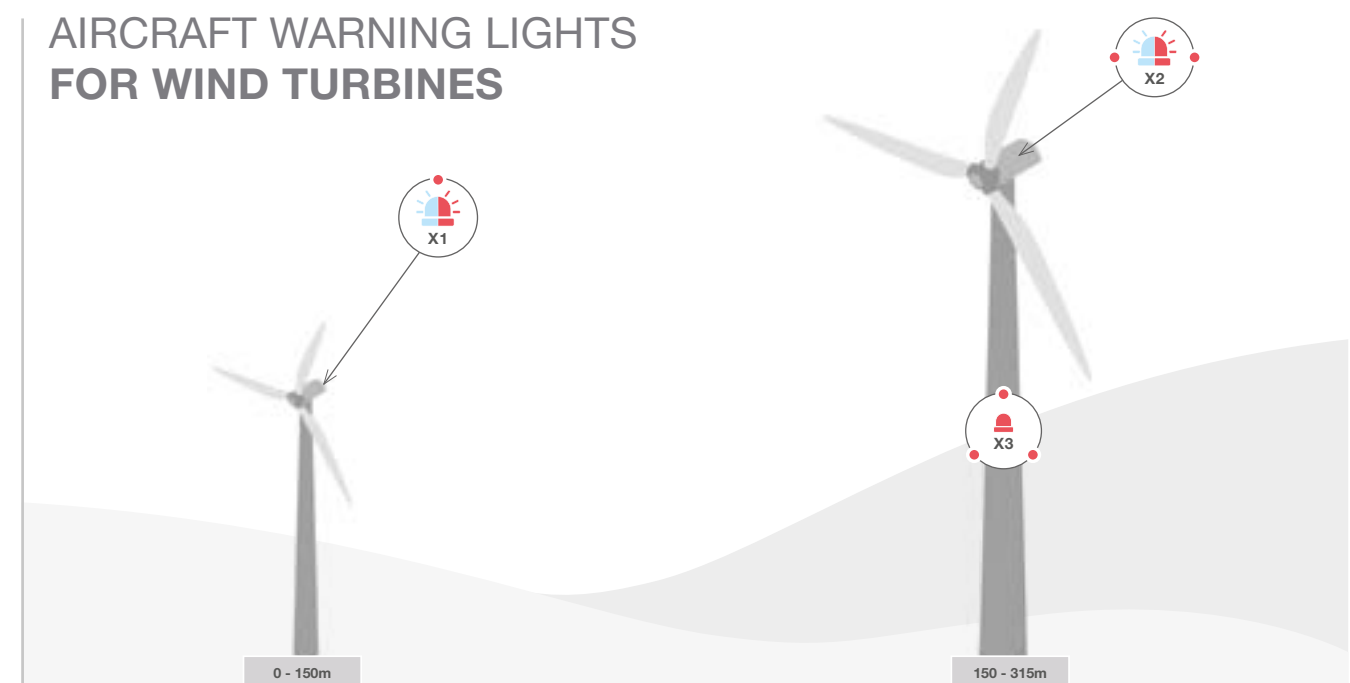
- Low Intensity Light type A or B (Type B mandatory for the beaconing of intermediary levels)
- Medium Intensity Light type A
- Medium Intensity Light type B
- Medium Intensity Light type A&B
- Medium Intensity Light type A + Low Intensity Light type B
- High Intensity Light type A
- High Intensity Light type B
- Low Intensity Induction Light type A or B
- Aircraft Warning Sphere 600mm (orange, white or red)



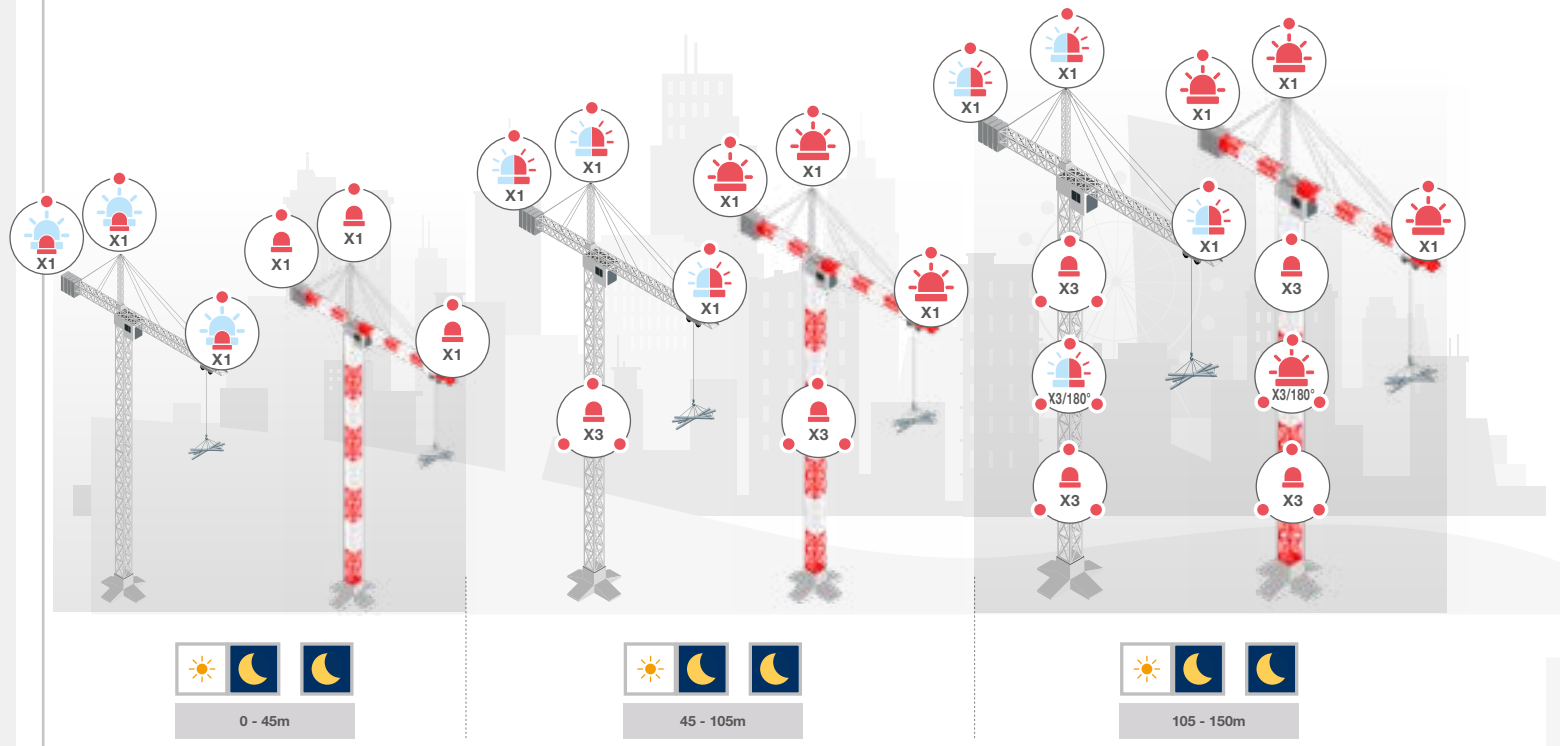
AIRCRAFT WARNING LIGHTS FOR TELECOM PYLONS



AIRCRAFT WARNING LIGHTS FOR WIND TURBINES



AIRCRAFT WARNING LIGHTS FOR CRANES

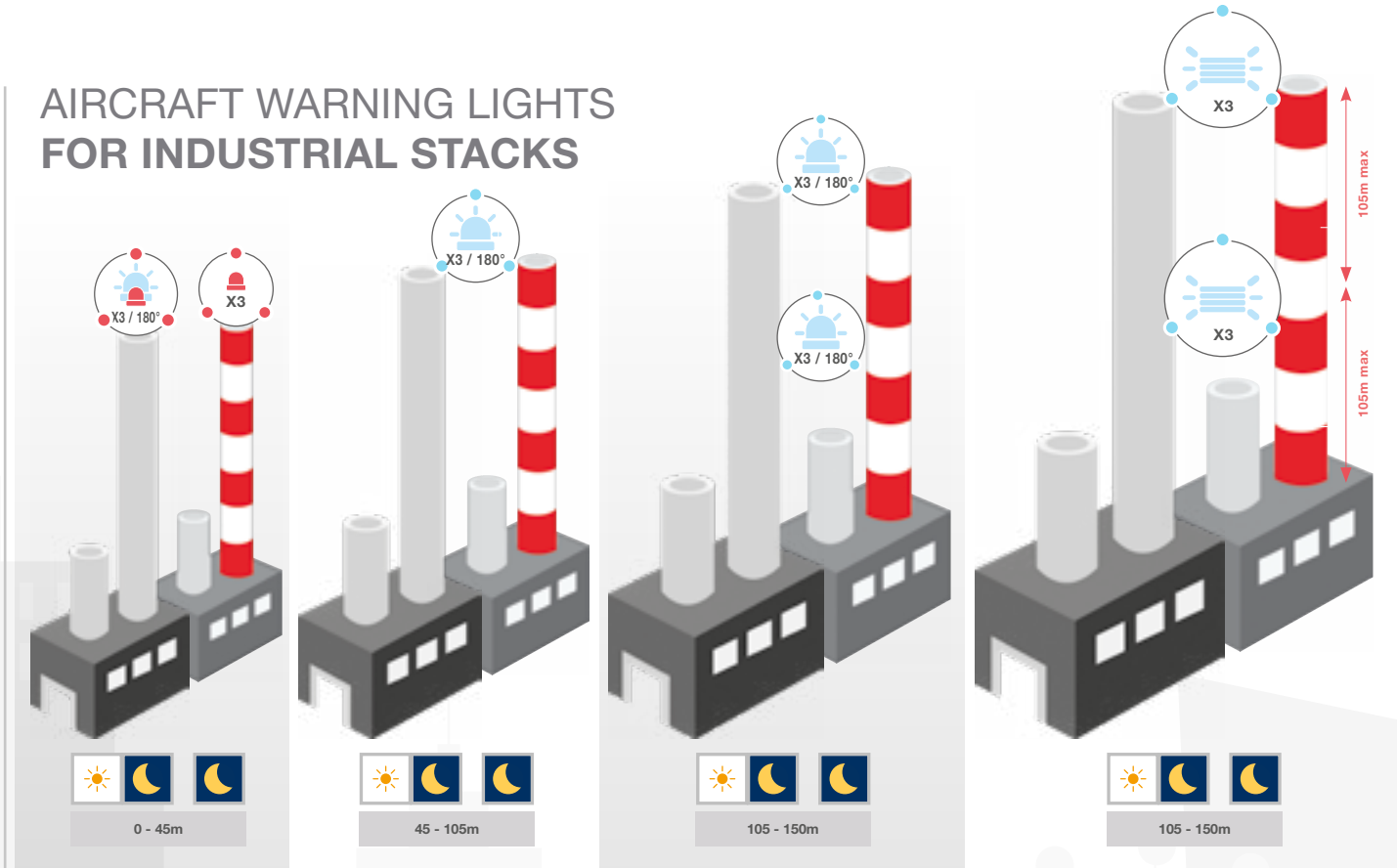


LEGENDE

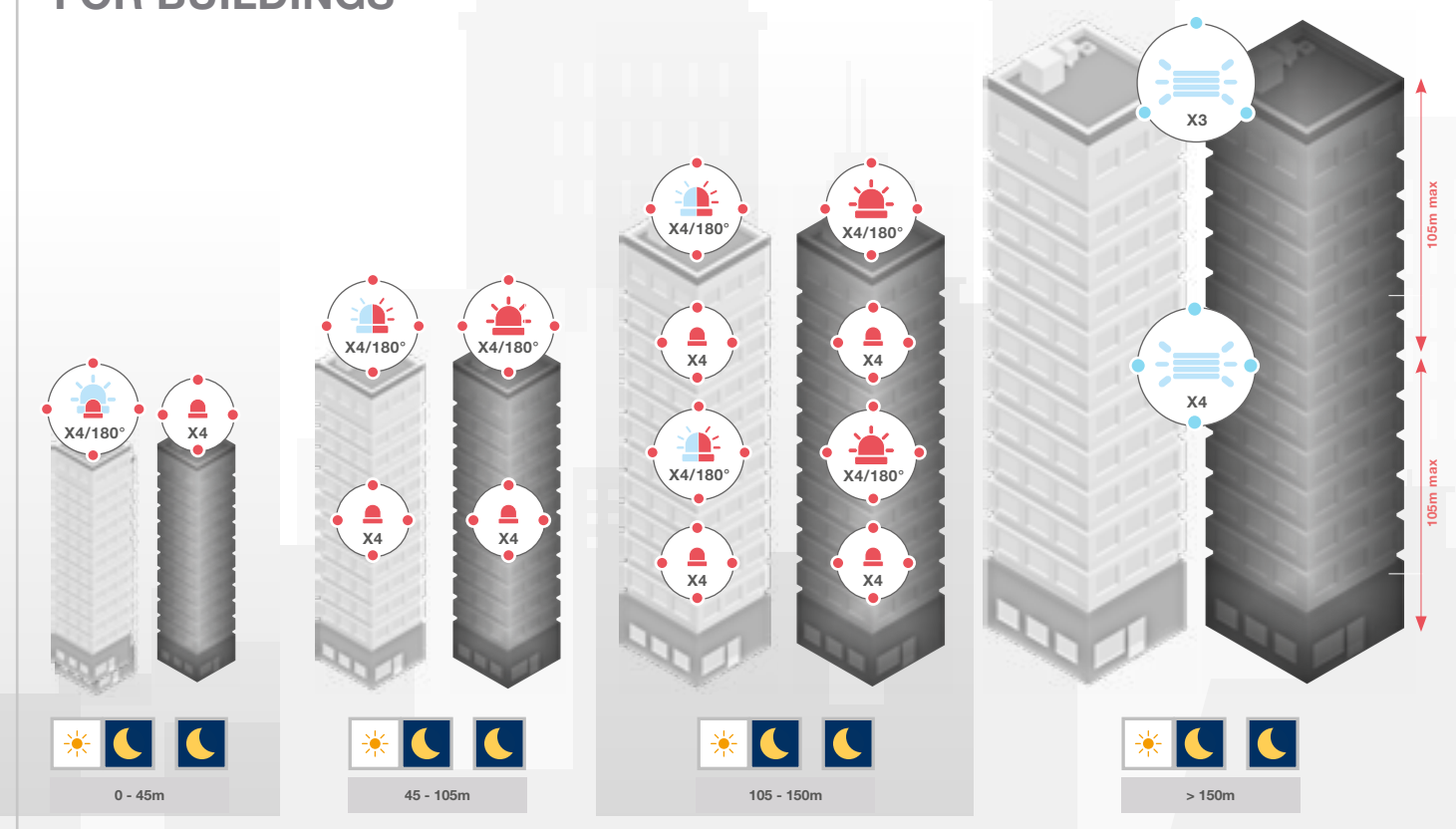
- Low Intensity Light type A or B (Type B mandatory for the beaconing of intermediary levels)
- High Intensity Light type A
- High Intensity Light type B
- Medium Intensity Light type A
- Low Intensity Induction Light type A or B
- Medium Intensity Light type B
- Aircraft Warning Sphere 600mm (orange, white or red)
- Medium Intensity Light type A&B
- Medium Intensity Light type A + Low Intensity Light type B



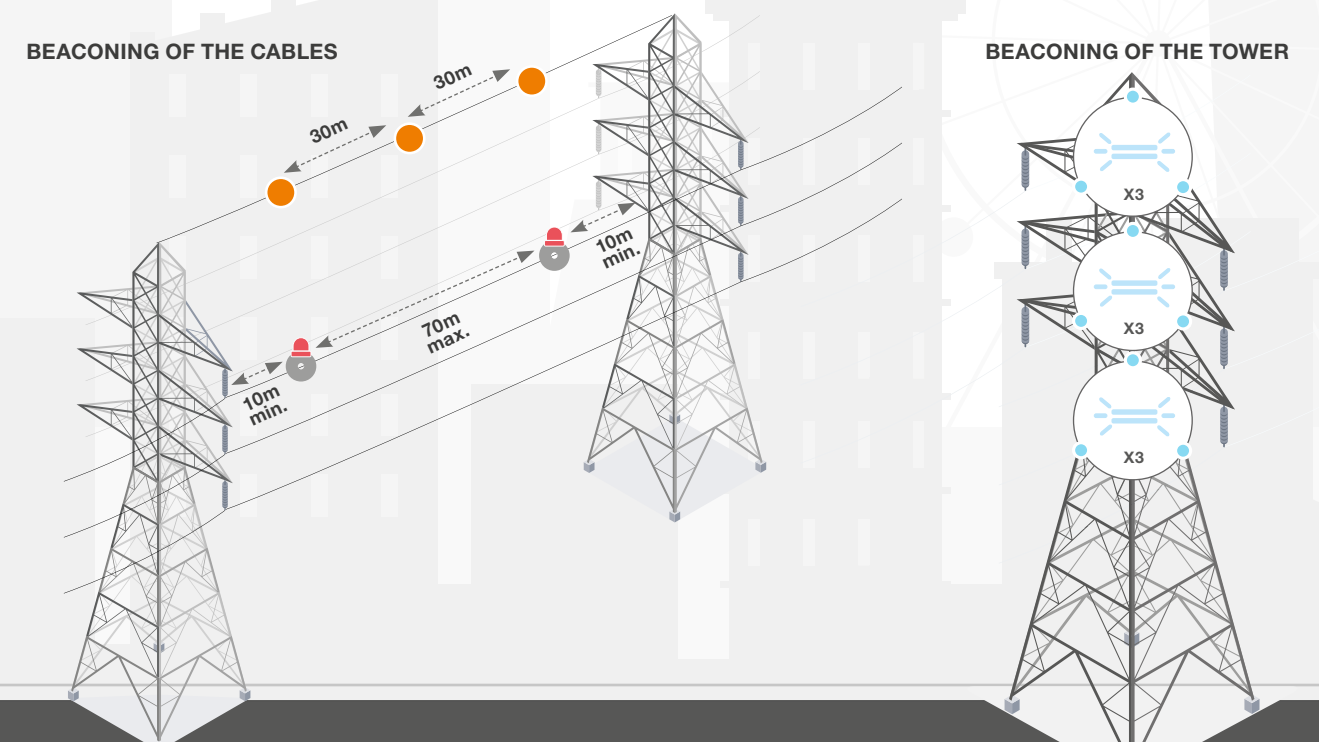
AIRCRAFT WARNING LIGHTS FOR INDUSTRIAL STACKS



AIRCRAFT WARNING LIGHTS FOR BUILDINGS



WARNING LIGHTS & SPHERES FOR HIGH VOLTAGE LINES



LOW INTENSITY OBSTRUCTION LIGHT

Type A

RED STEADY BURN – 10 CD NIGHT



01. DESCRIPTION

The **LEDEO BIA** is a low intensity light based on multi-LEDs technology. Dedicated to a night beaconing (red steady burning), it is a long lifetime beacon (100 000 hours), with a very low consumption (<2W). The LEDEO BIA can be provided with a photocell for an automatic switch ON / OFF, and a dry contact for failure alarm. It can be solar power supplied for areas where it is difficult to bring power supply, and it is designed for an easy installation.

02. ADVANTAGES

- Long life time > 10 years
- Multi-LEDs technology
- Low consumption < 2W
- Integrated photocell and dry contact (in option)
- DELTA BOX exclusive self-test when the photocell is integrated
- No maintenance
- 2-year warranty

03. APPLICATIONS

Rules concerning aircraft beaconing are established by the ICAO (Annex 14, Chapter 6). Low intensity beacons can be installed on structures up to 45m in height. According to the rules, an uninterruptible power supply cabinet has to be installed to insure a 12 hours beaconing in case of power supply failure.

04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LBIA00CC	12 to 48V DC	Not included	Not included
LBIA01AC	24V DC	Not included	Included
LBIA11AC	24V DC	Included	Included
LBIA01BC	48V DC	Not included	Included
LBIA11BC	48V DC	Included	Included
LBIA00MC	110-240V AC	Not included	Not included
LBIA01MC	110-240V AC	Not included	Included
LBIA11MC	110-240V AC	Included	Included



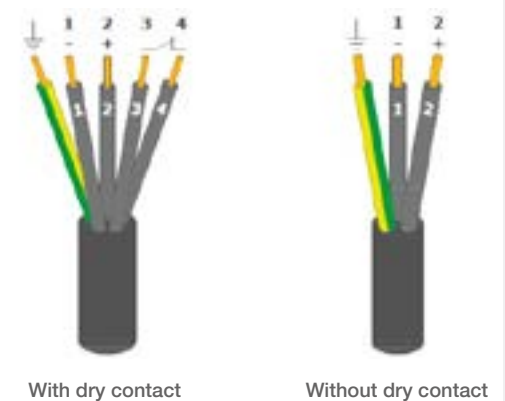
05. CHARACTERISTICS

	12, 24, 48V DC	240V AC
LUMINOUS		
Luminous source	Red LEDs	
Horizontal / Vertical beam	360° / 10°	
Luminous intensity	> 10 Cd	
MTBF	100 000 hours	
ELECTRICAL		
Voltage	12, 24, 48V DC	110 to 240V AC
Operating temperature	-55°C to +55°C	
Consumption	< 2 Watts max.	
Current I _{max}	To 12V: I=200mA To 24V: I=100mA To 48V: I=50mA	I < 10mA
Protection class	IP66	
Cable	2 meters	
MECHANICAL		
Body material	Composite	
Lens material	Polycarbonate with bird spike	
Mounting	M6 screw (included)	
Height / Width	170mm / 120mm	
Screw spacing	50mm	
Weight	< 1 Kg	
ENVIRONMENTAL		
Humidity	100%	
Frost	-60°C	
Wind speed	240 Km/h	
CERTIFICATIONS		
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE	
OACI	Annex 14, Volume I, Chapter 6	
Quality	ISO 9001 ; 2015	
WARRANTY		
Warranty period	2 years	

DIMENSIONS



WIRING



+ AVAILABLE VERSIONS

ZAMAC BOX	ZAMAC BOX + UPS
<p>Light mounted on a ZAMAC aluminum box, with 2 adjustable arms for more flexibility during installation. Includes cable gland and terminal block.</p>	<p>Light mounted on a ZAMAC aluminum box, with 2 adjustable arms for more flexibility during installation, and a battery kit for 12 hours of autonomy. Includes cable gland and terminal block.</p>

AVAILABLE ACCESSORIES FOR INSTALLATION

- Stainless steel mounting
- Driving box
- Power supply
- Safety power supply
- Solar kit



LOW INTENSITY OBSTRUCTION LIGHT

Type B

RED STEADY BURN – 32 CD NIGHT



01. DESCRIPTION

The **LEDEO BIB** is a low intensity light based on multi-LEDs technology. Dedicated to a night beaconing (red steady burning), it is a long lifetime beacon (100 000 hours), with a very low consumption (<6W). The LEDEO BIB can be provided with a photocell for an automatic switch ON / OFF, and a dry contact for failure alarm. It can be solar power supplied for areas where it is difficult to bring power supply, and it is designed for an easy installation.

02. ADVANTAGES

- Long life time > 10 years
- Low consumption < 6W
- Integrated photocell and dry contact (in option)
- DELTA BOX exclusive self-test when the photocell is integrated
- No maintenance
- 2-year warranty

03. APPLICATIONS

Rules concerning aircraft beaconing are established by the ICAO (Annex 14, Chapter 6). Low intensity beacons can be installed on structures up to 45 meter in height. For structures > 45m, it is necessary to mark the highest level with Medium Intensity light and to install at the intermediate level the Low Intensity Type B. According to the rule, an uninterruptible power supply cabinet has to be installed to insure a 12 hours beaconing in case of power supply failure.



04. MODELS

REFERENCE	VOLTAGE	VOLTAGE	DRY CONTACT
LBIB00DC	24 to 48V DC	Not included	Not included
LBIB01AC	24V DC	Not included	Included
LBIB11AC	24V DC	Included	Included
LBIB01BC	48V DC	Not included	Included
LBIB11BC	48V DC	Included	Included
LBIB00MC	110-240V AC	Not included	Not included
LBIB01MC	110-240V AC	Not included	Included
LBIB11MC	110-240V AC	Included	Included

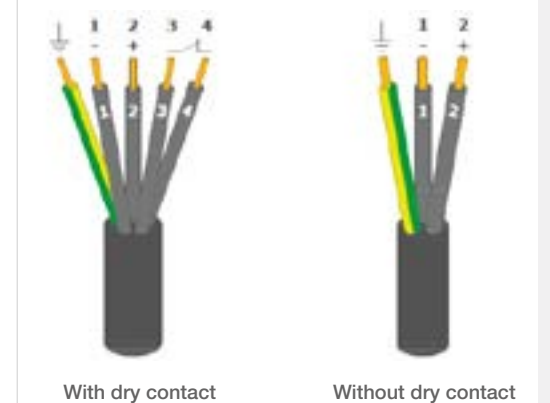
05. CHARACTERISTICS

	24-48V DC	230V AC
LUMINOUS		
Luminous source	Red LEDs	
Horizontal / Vertical beam	360° / 10°	
Luminous intensity	> 32 Cd	
MTBF	100 000 hours	
ELECTRICAL		
Voltage	24, 48V DC	110 to 240V AC
Operating temperature	-55°C to +55°C	
Consumption	< 6 Watts max.	
Current I _{max}	To 24V: I=220mA To 48V: I=110mA	I < 23mA
Protection class	IP66	
Cable	2 meters	
MECHANICAL		
Body material	Aluminum	
Lens material	Polycarbonate with bird spike	
Mounting	M6 screw (included)	
Height / Width	245mm / 120mm	
Screw spacing	50mm	
Weight	< 1,5 Kg	
ENVIRONMENTAL		
Humidity	100%	
Frost	-60°C	
Wind speed	240 Km/h	
CERTIFICATIONS		
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE	
OACI	Annex 14, Volume I, Chapter 6	
FAA	Compliant FAA L-810	
Quality	ISO 9001 ; 2015	
WARRANTY		
Warranty period	2 years	

DIMENSIONS



WIRING



+ AVAILABLE VERSIONS

ZAMAC BOX	ZAMAC BOX + UPS
 Light mounted on a ZAMAC aluminum box, with 2 adjustable arms for more flexibility during installation. Includes cable gland and terminal block.	 Light mounted on a ZAMAC aluminum box, with 2 adjustable arms for more flexibility during installation, and a battery kit for 12 hours of autonomy. Includes cable gland and terminal block.

AVAILABLE ACCESSORIES FOR INSTALLATION

- Stainless steel mounting
- Driving box
- Power supply
- Safety power supply
- Solar kit



Pylon



Airport



Building



Stack



HV Line



Crane



Structure



Wind Turbine

LOW INTENSITY OBSTRUCTION LIGHT TWINY AND DOUBLE

RED STEADY BURN – 10 CD NIGHT (TYPE A) OR 32 CD NIGHT (TYPE B)



TYPE A



TYPE B



01. DESCRIPTION

The **LEDEO TWINY** and **LEDEO DOUBLE** is a one block low intensity beacon with 2 light bulbs. Thanks to DELTA BOX exclusive redundant technology, one bulb can serve as a back-up (TWINY version). For specific applications, the 2 bulbs can also operate at the same time (DOUBLE version). Each version is available with solar power supply as an option. The Multi-LEDs technology offers a long lifetime (100 000 hours). The specific design of the box is the most convenient solution on the market for flexible installation: the mounting frame is part of the box and the light position can be adjusted in the desired position.

02. ADVANTAGES

- Long life time > 10 years
- Low consumption
- Integrated photocell and dry contact (in option)
- DELTA BOX exclusive self-test when the photocell is integrated
- No maintenance
- 2-year warranty

03. APPLICATIONS

Rules concerning aircraft beaoning are established by the ICAO (Annex 14, Chapter 6). Low intensity beacons can be installed on structures up to 45m in height. According to the rules, an uninterruptible power supply cabinet has to be installed to insure a 12 hours beaoning in case of power supply failure.

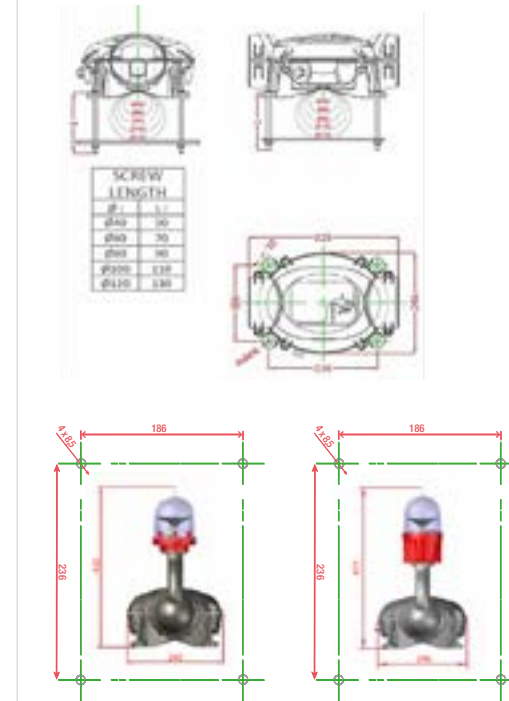
04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT	MODE
LBIATWCB	48V DC	Included	Included	Twiny
LBIATWMB	110-240V AC	Included	Included	Twiny
LBIADBCB	48V DC	Included	Included	Double
LBIADBMB	110-240V AC	Included	Included	Double
LBIBTWCB	48V DC	Included	Included	Twiny
LBIBTWMB	110-240V AC	Included	Included	Twiny
LBIBDBC	48V DC	Included	Included	Double
LBIBDBMB	110-240V AC	Included	Included	Double

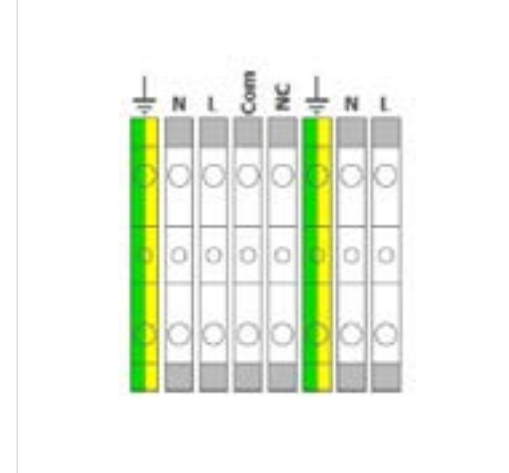
05. CHARACTERISTICS

	TYPE A	TYPE B
LUMINOUS		
Luminous source	Red LEDs	
Horizontal / Vertical beam	360° / 10°	
Luminous intensity	> 10 Cd	> 32 Cd
MTBF	100 000 hours	
ELECTRICAL		
Voltage	48V DC or 110 to 240V AC	
Operating temperature	-55°C to +55°C	
Consumption	Twiny < 2 Watts	< 6 Watts
	Double < 4 Watts	< 12 Watts
Current Imax	Twiny In 48V: I < 50mA In 230V: I < 10mA	In 48V: I < 110mA In 230V: I < 23mA
	Double In 48V: I < 100mA In 230V: I < 20mA	In 48V: I < 220mA In 230V: I < 46mA
Protection class	IP66	
MECHANICAL		
Body material (box)	Composite	Aluminum
Lens material	Polycarbonate with bird spike	
Height / Width	420mm / 240mm	477mm / 240mm
Weight	< 5 Kg	< 8 Kg
ENVIRONMENTAL		
Humidity	100%	
Frost	-60°C	
Wind speed	240 Km/h	
CERTIFICATIONS		
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE	
OACI	Annex 14, Volume I, Chapter 6	
FAA	Compliant FAA L-810 (Type B)	
Quality	ISO 9001 ; 2015	
WARRANTY		
Warranty period	2 years	

DIMENSIONS



WIRING



+ AVAILABLE VERSIONS

ZAMAC BOX + UPS

Light mounted on a ZAMAC aluminum box, with 2 adjustable arms for more flexibility during installation, and a battery kit for 12 hours of autonomy. Includes cable gland and terminal block.

AVAILABLE ACCESSORIES FOR INSTALLATION

- Stainless steel mounting
- Driving box
- Power supply
- Safety power supply
- Solar kit
- Iron plate and thread rod



LOW INTENSITY OBSTRUCTION LIGHT SOLAR TYPE A – SINGLE AND TWINY RED STEADY BURN – 10 CD NIGHT



SOLEO TYPE A - SINGLE



01. DESCRIPTION

The **SOLEOBIA** and **SOLEOBIA TWINY** are environmentally friendly systems, dedicated to an autonomous night beaconing (red steady burning). The long life LEDs (100 000 hours) enable to have a maintenance free system, and the solar station is dimensioned for more than 120 hours of autonomy. The device is provided with a photocell for an automatic switch ON / OFF and a dry contact for failure alarm. It is also available with a 110-240V input as back-up power supply. The TWINY version is equipped with a second light bulb and with the exclusive redundant DELTA BOX system, which automatic test is launched every day. In case of failure of one light bulb, the second light bulb automatically switches on. The specific design of the box is the most convenient solution on the market for installation: the mounting frame is part of the box and its arms can be adjusted in horizontal or vertical position.

02. ADVANTAGES

- Long life time > 10 years
- Proven solar technology and dimensionning
- DELTA BOX exclusive self-test when the photocell is integrated
- Autonomous system (no need for other power supply)
- 2-year warranty
- Zamac box with epoxy powder painting
- Available with cable between the lights and the solar unit for an easier accessibility to the box and panels.

SOLEO TYPE A - TWINY



03. APPLICATIONS

Rules concerning aircraft beaconing are established by the ICAO (Annex 14, Chapter 6). Low intensity beacons can be installed on structures up to 45m in height. According to the rules, an uninterruptible power supply cabinet has to be installed to insure a 12 hours beaconing in case of power supply failure.

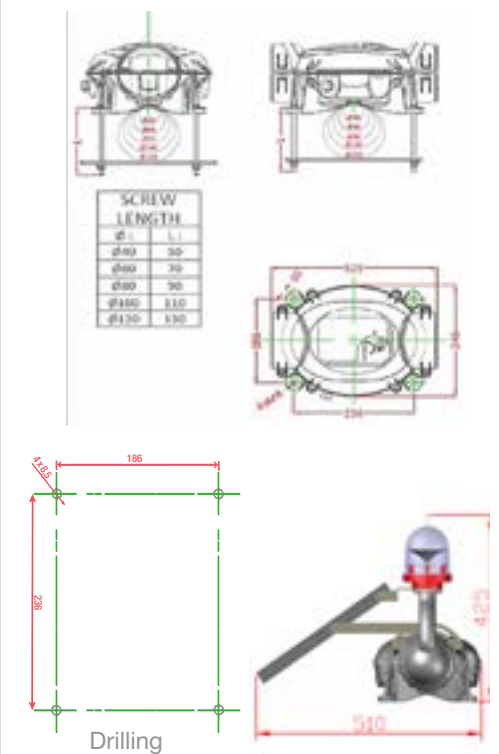
04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT	TYPE
SOLBIA10C	Solar	Included	Not Included	Single
SOLBIA11C	Solar	Included	Included	Single
SOLBIATWC	Solar	Included	Included	Twiny

05. CHARACTERISTICS

LUMINOUS	
Luminous source	Red LEDs
Horizontal / Vertical beam	360° / 10°
Luminous intensity	> 10 Cd
MTBF	100 000 hours
ELECTRICAL	
Voltage	Solar
Operating temperature	-10°C to +55°C
Solar panel	10 Watts Polycrystalline
Battery	2x AGM 12V 7Ah
Autonomy	120 hours (without charging)
Protection class	IP66
MECHANICAL	
Body material	Zamac
Lens material	Composite
Mounting	M8 screw (in option)
Height / Width	425mm / 510mm
Weight	< 11 Kg
Solar panel dimensions	345mm x 245 mm
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

DIMENSIONS



AVAILABLE ACCESSORIES FOR INSTALLATION



- Specific stainless steel mounting
- Iron plate and thread rod


+ AVAILABLE VERSIONS

UNCOUPLED BULB



Can be provided with 5 to 20m of cable between the bulb and solar unit, to ease maintenance operations.

230V BACK-UP



The ZAMAC box is provided with a 110-240V input for a back-up power supply.

REINFORCED



Available with a 20W solar panel for areas with low sun exposure



Pylon



Airport



Building



Stack



HV Line



Crane



Structure



Wind Turbine

LOW INTENSITY OBSTRUCTION LIGHT SOLAR TYPE B – SINGLE AND TWINY RED STEADY BURN – 32 CD NIGHT



SOLEO TYPE B - SINGLE



01. DESCRIPTION

The **SOLEOBIB** and **SOLEOBIB TWINY** are environmentally friendly systems, dedicated to an autonomous night beaconing (red steady burning). The long life LEDs (100 000 hours) enable to have a maintenance free system, and the solar station is dimensioned for more than 60 hours of autonomy. The device is provided with a photocell for an automatic switch ON / OFF and a dry contact for failure alarm. It is also available with a 110-240V input as back-up power supply. The TWINY version is equipped with a second light bulb, and with the exclusive redundant DELTA BOX system, which automatic test is launched every day. In case of failure of one light bulb, the second light bulb automatically switches on. The specific design of the box is the most convenient solution on the market for installation: the mounting frame is part of the box and its arms can be adjusted in horizontal or vertical position.

02. ADVANTAGES

- Long life time > 10 years
- Proven solar technology and dimensioning
- DELTA BOX exclusive self-test when the photocell is integrated
- Autonomous system (no need for other power supply)
- 2-year warranty
- Zamac box with epoxy powder painting
- Available with cable between the lights and the solar unit for an easier accessibility to the box.

SOLEO TYPE B - TWINY



03. APPLICATIONS

Rules concerning aircraft beaconing are established by the ICAO (Annex 14, Chapter 6). Low intensity beacons can be installed on structures up to 45m in height. According to the rules, an uninterruptible power supply cabinet has to be installed to insure a 12 hours beaconing in case of power supply failure.

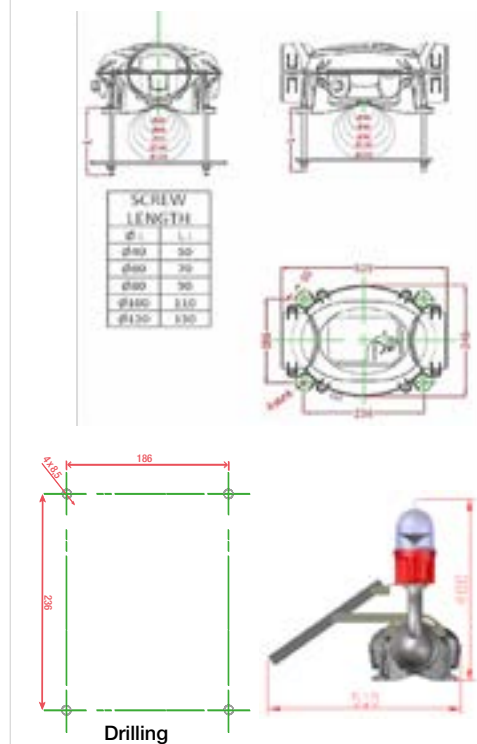
04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT	TYPE
SOLBIB10C	Solar	Included	Not Included	Single
SOLBIB11C	Solar	Included	Included	Single
SOLBIBTWC	Solar	Included	Included	Twiny

05. CHARACTERISTICS

LUMINOUS	
Luminous source	Red LEDs
Horizontal / Vertical beam	360° / 10°
Luminous intensity	> 32 Cd
MTBF	100 000 hours
ELECTRICAL	
Voltage	Solar
Operating temperature	-10°C to +55°C
Solar panel	1 x 20 Watts Polycrystalline
Battery	2 x AGM 12V 7Ah
Autonomy	60 hours (without charging)
Protection class	IP66
MECHANICAL	
Body material	Zamac
Lens material	Aluminum
Mounting	M8 screw (in option)
Height	480mm
Weight	< 15 Kg
Solar panel dimensions	650 mm x 290 mm
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
FAA	Compliant FAA L-810
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

DIMENSIONS






AVAILABLE ACCESSORIES FOR INSTALLATION



- Specific stainless steel mounting
- Iron plate and thread rod

+ AVAILABLE VERSIONS

UNCOUPLED BULB	230V BACK-UP	REINFORCED
 <p>Can be provided with 5 to 20m of cable between the bulb and solar unit, to ease maintenance operations.</p>	 <p>The ZAMAC box is provided with a 110-240V input for a back-up power supply.</p>	 <p>Available with a 30W solar panel for areas with low sun exposure</p>



LOW INTENSITY OBSTRUCTION LIGHT EXPLOSION PROOF

RED STEADY BURN – 10 CD NIGHT (TYPE A) OR 32 CD NIGHT (TYPE B)



01. DESCRIPTION

The LEDEO BIA / LEDEO BIB ATEX version is a low intensity beacon particularly adapted to dangerous environments. With an explosion proof body and a Multi-LEDs technology, it is dedicated to the night beaconing of obstacles in industrial areas. The beacon has a long lifetime (100 000 hours) and a very low consumption: <2W for the type A and <6W for the type B. It can be provided with a photocell for an automatic switch ON/OFF and with a dry contact for failure alarm.

02. ADVANTAGES

- IP Class 66 Explosion proof body
- Long life time > 10 years
- Low consumption between 2W (type A) and 6W (type B)
- Integrated photocell and dry contact (in option)
- DELTA BOX exclusive self-test when the photocell is integrated
- No maintenance
- 2-year warranty

03. APPLICATIONS

Rules concerning aircraft beaconing are established by the ICAO (Annex 14, Chapter 6). Low intensity beacons can be installed on structures up to 45 meters in height. According to the rules, an uninterruptible power supply cabinet must be installed to insure a 12 hours beaconing in case of power supply failure.

04. MODELS

Low intensity explosion proof TYPE A

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LBIA00aX	12, 24, 48V DC	Not included	Not Included
LBIA01AX	24, 48V DC	Not included	Included
LBIA11AX	24, 48V DC	Included	Included
LBIA00MX	110-240V AC	Not included	Not included
LBIA01MX	110-240V AC	Not included	Included
LBIA11MX	110-240V AC	Included	Included

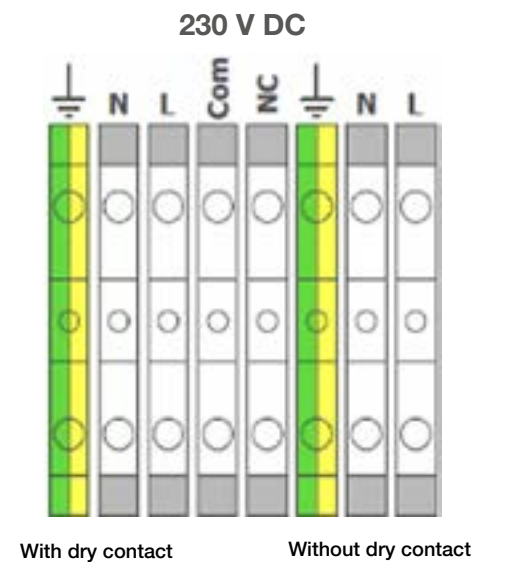
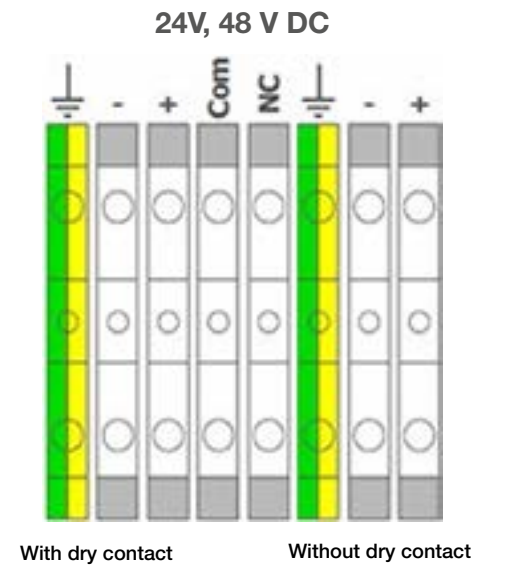
Low intensity explosion proof TYPE B

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LBIB00CX	24, 48V DC	Not included	Not Included
LBIB11AX	24V DC	included	Included
LBIB01BX	48V DC	Not included	Included
LBIB00MX	110-240V AC	Not included	Not included
LBIB01MX	110-240V AC	Not included	Included
LBIB11MX	110-240V AC	Included	Included

05. CHARACTERISTICS

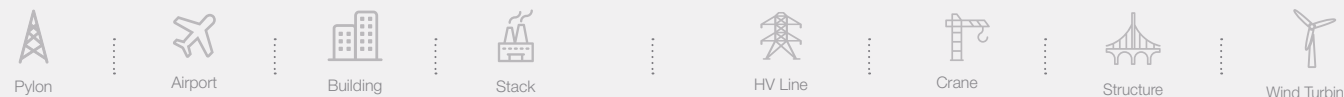
	TYPE A	TYPE B
LUMINOUS		
Luminous source	Red LEDs	
Horizontal / Vertical beam	360° / 10°	
Luminous intensity	> 10 Cd	> 32 Cd
MTBF	100 000 hours	
ELECTRICAL		
Operating temperature	-55°C to +55°C	
Consumption	< 2 Watts max.	< 6 Watts max
Current I _{max}	In 12V: I < 200mA	
	In 24V: I < 100mA	In 24V: I < 220mA
	In 48V: I < 50mA	In 48V: I < 110mA
	In 230V: I = 10mA	In 230V: I = 23mA
Protection class	IP66	
Cable	2 meters	
MECHANICAL		
Body material	Aluminum	
Lens material	Borosilicate Glass	
Mounting	M8 screw (in option)	
Height / Width	260mm / 205mm	
Weight	< 10 Kg	
ENVIRONMENTAL		
Humidity	100%	
Frost	-60°C	
Wind speed	240 Km/h	
CERTIFICATIONS		
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE	
OACI	Annex 14, Volume I, Chapter 6	
Quality	ISO 9001 ; 2015	
WARRANTY		
Warranty period	2 years	

WIRING



AVAILABLE ACCESSORIES FOR INSTALLATION

- Stainless steel mounting
- Driving box
- Power supply
- Safety power supply
- Solar kit



OBSTRUCTION LOW INTENSITY LIGHT

TYPE A & B – 6.6A

RED STEADY BURN – 10 CD NIGHT



01. DESCRIPTION

The LEDEO BIA 6.6A is a low intensity beacon equipped with LEDs technology, directly connected to the 6.6A loop of airports thanks to the integrated isolating transformer. Dedicated to night beaconing (steady red), it offers exceptional advantages in terms of longevity (100 000 hours), robustness and energy consumption (<2W). The double male and female secondary FAA connector allows the connection in series of multiple beacons, without any additional isolating transformer. Colors available: blue, orange, red, white, green

02. ADVANTAGES

- Directly connectable to the 6.6A loop
- Double male and female secondary FAA connectors for connection in series / or primary loop male connection.
- Long Life Time > 10 years
- Multi-LEDs technology
- Low consumption < 2W
- No maintenance
- 2 year-warranty

03. CHARACTERISTICS

	TYPE A	TYPE B
LUMINOUS		
Luminous source	Red LEDs	
Horizontal / Vertical beam	360° / 10°	
Luminous intensity	> 10 Cd	> 32 Cd
MTBF	100 000 hours	
ELECTRICAL		
Supply voltage	6.6A	
Operating temperature	-55°C to +55°C	
Consumption	< 2 Watts max.	< 6 Watts max.
Protection class	IP66	
Cable	0,5 meters	
MECHANICAL		
Body material	Aluminum	
Lens material	Polycarbonate with bird spike	
Mounting	M6 screw (included)	
Height / Width	224mm / 120mm	
Screw spacing	50mm	
Weight	< 2 Kg	
ENVIRONMENTAL		
Humidity	100%	
Frost	-60°C	
Wind speed	240 Km/h	
CERTIFICATIONS		
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE	
OACI	Annex 14, Volume I, Chapter 6	
FAA	Compliant FAA L-810	
Quality	ISO 9001; 2015	

04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LBIA06C	6.6A	Not included	Not included
LBIB06C	6.6A	Not included	Not included

OBSTRUCTION LOW INTENSITY LIGHT

TYPE B - INFRARED

RED STEADY BURN – 32 CD NIGHT + INFRARED STEADY BURN



01. DESCRIPTION

The **LEDEO BIB** Infrared (IR) is a low intensity light based on multi-LEDs technology. In addition to the red LEDs for a night beaconing (red steady burning), it is provided with infrared LEDs to enable visibility with night vision glasses. It is a long lifetime beacon (100 000 hours), with a low consumption (<10,5W). The LEDEO BIB IR can be provided with a photocell for an automatic switch ON / OFF, and a dry contact for failure alarm. It can be solar power supplied for areas where it is difficult to bring power supply, and it is designed for an easy installation.

02. ADVANTAGES

- Long life time > 10 years
- Multi-LEDs red & infra-red technology to operate with night vision glasses
- Low consumption < 10,5W
- Integrated photocell and dry contact (in option)
- DELTA BOX exclusive self-test when the photocell is integrated
- No maintenance
- 2-year warranty

03. CHARACTERISTICS

	48V DC	110-240V AC
LUMINOUS		
Luminous source	Red LEDs	
Horizontal / Vertical beam	360° / 10°	
Luminous intensity red	> 32 Cd	
Luminous intensity infra-red	3 mW/sr min between +5° / +90° 25 mW/sr min between 0° / +5° 60 mW/sr max between -90° / +90° 3 mW/sr min between +5° / +90°	
Wave length infra-red LEDs	860 nm 100% relative intensity	
MTBF	100 000 hours	
ELECTRICAL		
Operating temperature	-55°C to +55°C	
Consumption	< 10,5 Watts max.	
Current Imax	I =45mA	I < 220Ma
Protection class	IP66	
Cable	2 meters	
MECHANICAL		
Box material	Aluminum	
Lens material	Polycarbonate with bird spike	
Mounting	M6 screw (included)	
Height / Width	245mm / 120mm	
Screw spacing	50mm	
Weight	< 1,5 Kg	
ENVIRONMENTAL		
Humidity	100%	
Frost	-60°C	
Wind speed	240 Km/h	
CERTIFICATIONS		
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE	
OACI	Annex 14, Volume I, Chapter 6	
FAA	Compliant FAA L-810	
Quality	ISO 9001 ; 2015	

04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LBIBIR00BC	48V DC	Not included	Not included
LBIBIR01BC	48V DC	Not included	Included
LBIBIR11BC	48V DC	Included	Included
LBIBIR00MC	110-240V AC	Not included	Not included
LBIBIR01MC	110-240V AC	Not included	Included
LBIBIR11MC	110-240V AC	Included	Included



MEDIUM INTENSITY OBSTRUCTION LIGHT TYPE A

WHITE FLASH (20 000 CD DAY / 20 000 CD TWILIGHT / 2 000 CD NIGHT)



01. DESCRIPTION

The **LEDEOMIA** is a medium intensity light equipped with multi-LEDs technology, developed with an aluminum design for a natural fresh cooling system. Dedicated to a day and night beaconing, it has a long life time (100 000 hours), a robust design, and a low consumption (starting from 40W). The LEDEOMIA is provided with a photocell for an automatic switch ON / OFF, and a dry contact for failure alarm. Moreover, it can be solar power supplied and has been designed for an easy installation.

02. ADVANTAGES

- Integrated synchronization wire (optical fiber, GPS and TCPIP available)
- Long life time > 10 years
- Multi-LEDs technology
- Average consumption <40W
- DELTA BOX exclusive self-test included with photocell
- No maintenance
- 2-year warranty
- Zamac box with epoxy powder painting
- IP66

03. APPLICATIONS

Rules concerning aircraft beaconing are established by the ICAO (Annex 14, Chapter 6). Medium Intensity lights can be installed on structures from 45 to 150 meters tall, with an intermediary level of marking. According to the rules, an uninterruptible power supply cabinet has to be installed to insure a 12 hours of beaconing in case of power supply failure.



04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LMIA01BB*	48V DC	Not included	included
LMIA11BB	48V DC	Included	Included
LMIA01MB*	110-240V AC	Not included	included
LMIA11MB	110-240V AC	Included	Included

* to be used with an external DELTA BOX photocell

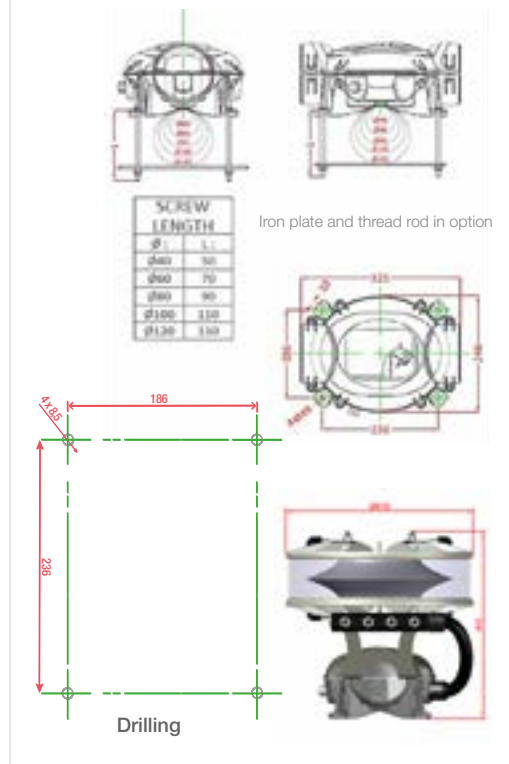
05. CHARACTERISTICS

LUMINOUS	
Luminous source	White flash LEDs
Horizontal / Vertical beam	360° / 3°
Luminous intensity	20 000 Cd Day 2 000 Cd Night
Flash frequency	20 to 60 fpm
MTBF	100 000 hours
ELECTRICAL	
Voltage	48V DC / 110 to 240V AC
Operating temperature	-20°C to +55°C
Consumption	< 40 Watts at 20 fpm
Current Imax	In 48V: I = 4 400mA In 230V: I < 1 000mA
Protection class	IP66
MECHANICAL	
Box material	Zamac
Body lamp material	Aluminum
Lens material	Polycarbonate
Mounting	M8 screw (in option)
Height / Width	410mm / 410mm
Weight	< 17 Kg
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
FAA	Compliant FAA L-865
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

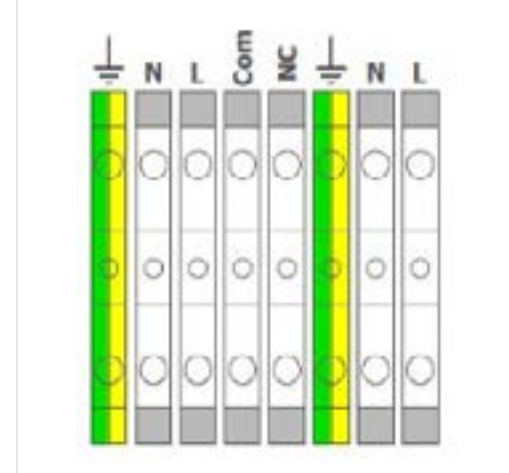
+ AVAILABLE VERSIONS

180° VERSION	
	The number of LEDs is divided by two for beacons that need to flash only over a 180° horizontal beam. It enables to decrease the power consumption.

DIMENSIONS



WIRING



AVAILABLE ACCESSORIES FOR INSTALLATION

- Power supply cabinet
- UPS System
- Solar kit
- Type "L" fixation mountings



MEDIUM INTENSITY OBSTRUCTION LIGHT TYPE B

RED FLASH (2 000 CD NIGHT)



01. DESCRIPTION

The **LEDEO SMIB** is a medium intensity light with multi-LEDs technology, developed with a zamac design for a natural fresh cooling system. Dedicated to a night beaconing, it is a long life time system (100 000 hours), very strong with a low consumption (6W at 20 flashes/minute). The LEDEO SMIB is provided with a photocell for an automatic switch ON/OFF, and a dry contact for failure alarm. Moreover, it can be solar power supplied. It has been designed for an easy installation.

02. ADVANTAGES

- Integrated synchronization wire (optical fiber, GPS and TCPIP available)
- Long life time > 10 years
- Multi-LEDs
- Low consumption 6W (20 flashes/minute)
- DELTA BOX exclusive self-test included with photocell
- No maintenance
- Zamac box with epoxy powder painting
- IP66
- Light and compact design for an easy installation
- External LED for visual diagnostic
- Modulation of consumption according to exterior T°C
- Connection box integrated in the light
- 2-year warranty



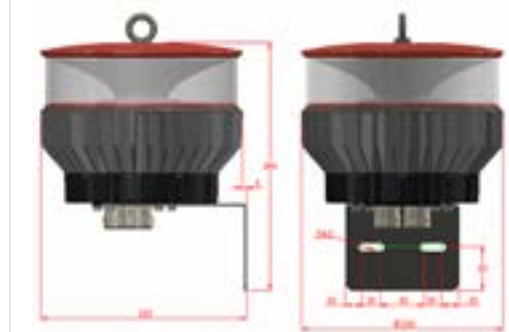
03. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
SMIB01AB	24V DC	Not included	Included
SMIB11AB	24V DC	Included	Included
SMIB01BB	48V DC	Not included	Included
SMIB11BB	48V DC	Included	Included
SMIB01MB	110-240V AC	Not included	included
SMIB11MB	110-240V AC	Included	Included

04. CHARACTERISTICS

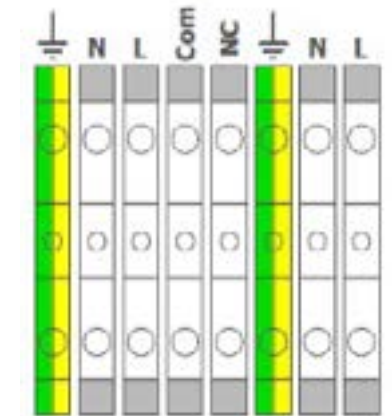
LUMINOUS	
Luminous source	Red flash LEDs
Horizontal / Vertical beam	360° / 3°
Luminous intensity	2 000 Cd Night
Flash frequency	20 to 60 fpm
MTBF	100 000 hours
ELECTRICAL	
Voltage	24V DC / 48V DC / 110 to 240V AC
Operating temperature	-45°C to +55°C
Consumption	< 6 Watts at 20 fpm
Current Imax	In 48V: I = 1.5 A In 230V: I < 400 mA
Protection class	IP66
MECHANICAL	
Box material	Zamac
Lens material	Polycarbonate
Mounting	M6 screw (included)
Height / Width (with fixation mountings)	284mm / 235mm
Weight	< 5 Kg
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
FAA	Compliant FAA L-864
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

DIMENSIONS



Fixation mountings in option

WIRING



AVAILABLE ACCESSORIES FOR INSTALLATION

- Power supply cabinet
- UPS System
- Solar kit
- Type "L" fixation mountings



Pylon



Airport



Building



Stack



HV Line



Crane



Structure



Wind Turbine

MEDIUM INTENSITY OBSTRUCTION LIGHT TYPE C

RED STEADY BURN (2 000 CD NIGHT)



01. DESCRIPTION

The **LEDEO MIC** is a medium intensity beacon equipped with the multi-LEDs technology. Dedicated to a night (red steady burning) beaconing, it is a long lifetime beacon (100 000 hours), very robust and with a low consumption (<50W). A photocell and a dry contact can be provided either in the light or deported in a control cabinet (safety power supply or conventional control panel). It can be solar power supplied and has been designed for an easy installation.

02. ADVANTAGES

- Long life time > 10 years
- Multi-LEDs technology
- Low consumption <50W
- DELTA BOX exclusive self-test included with photocell
- No maintenance
- 2-year warranty
- Zamac box with epoxy powder painting
- IP66



03. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LMIC00BB	48V DC	Not included	Not included
LMIC01BB	48V DC	Not included	Included
LMIC11BB	48V DC	Included	Included
LMIC00MB	110-240V AC	Not included	Not included
LMIC01MB	110-240V AC	Not included	Included
LMIC11MB	110-240V AC	Included	Included

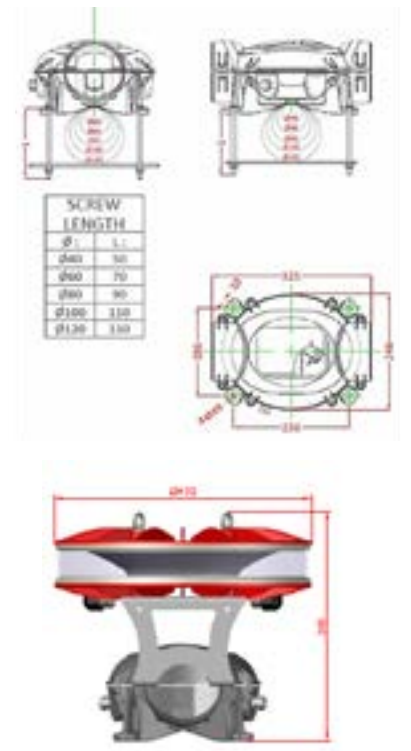
04. CHARACTERISTICS

LUMINOUS	
Luminous source	Red steady burning LEDS
Horizontal / Vertical beam	360° / 3°
Luminous intensity	2 000 Cd
MTBF	100 000 hours
ELECTRICAL	
Voltage	48V DC / 110 to 240V AC
Operating temperature	-40°C to +55°C
Consumption	< 50 Watts
Current Imax	To 48V: I = 1 500 mA
Protection class	To 230V: I < 350 mA IP66
MECHANICAL	
Box material	Zamac
Body lamp material	Aluminum
Lens material	Polycarbonate
Mounting	M8 screw (in option)
Height / Width	365mm / 410mm
Weight	< 16 Kg
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
FAA	Compliant FAA L-864
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

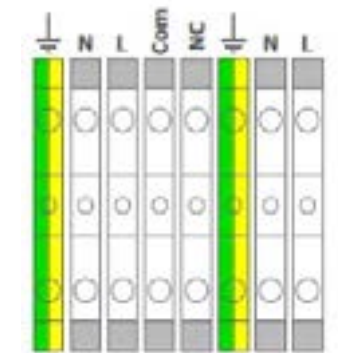
+ AVAILABLE VERSIONS

180° VERSION	
	The number of LEDs is divided by two for beacons that need to flash only over a 180° horizontal beam. It enables to decrease the power consumption.

DIMENSIONS



WIRING



AVAILABLE ACCESSORIES FOR INSTALLATION

- Power supply
- UPS System
- Solar kit
- Type "L" fixation mountings



MEDIUM INTENSITY OBSTRUCTION LIGHT DUAL TYPE A & B

WHITE FLASH (20 000 CD DAY / 20 000 CD TWILIGHT) + RED FLASH (2 000 CD NIGHT)



01. DESCRIPTION

The **LEDEO MIAB** is a medium intensity beacon equipped with the multi-LEDs technology. Dedicated to a day (white flash) and night (red flash) beaconing, it is a long life beacon (100 000 hours), very robust and with a low consumption (<40W). A photocell and a dry contact can be provided either in the light or deported in a control cabinet (safety power supply or conventional control panel). It can be solar power supplied and has been designed for an easy installation.

02. ADVANTAGES

- Integrated synchronization wired, optical fiber, GPS and TCP/IP available
- Long life time > 10 years
- Multi-LEDs
- Low consumption < 40W
- DELTA BOX exclusive self-test included with photocell
- No maintenance
- 2-year warranty
- Zamac box with epoxy powder painting
- IP66



03. APPLICATIONS

Rules concerning aircraft beaconing are established by the ICAO (Annex 14, Chapter 6). Medium Intensity lights can be installed on structures from 45 to 150 meters tall, with an intermediary level of marking. According to the rules, an uninterruptible power supply cabinet has to be installed to insure a 12 hours of beaconing in case of power supply failure.

04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LMIAB01BB*	48V DC	Not included	Included
LMIAB11BB	48V DC	Included	Included
LMIAB01MB*	110-240V AC	Not included	Included
LMIAB11MB	110-240V AC	Included	Included

* to be used with an external DELTA BOX photocell

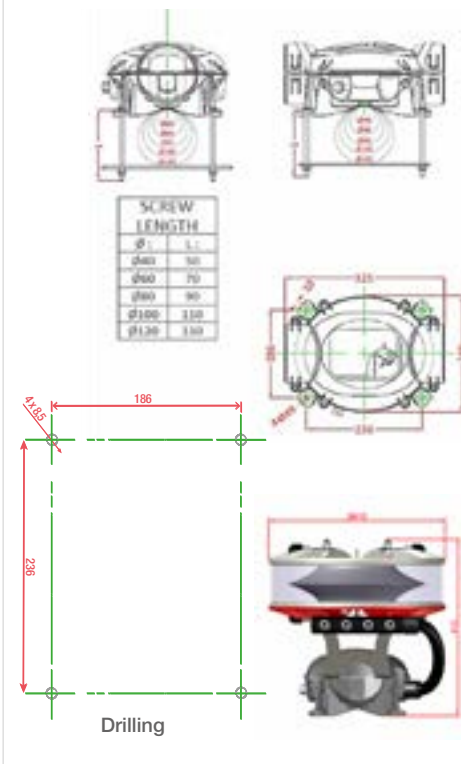
05. CHARACTERISTICS

LUMINOUS	
Luminous source	White / Red flash LEDs
Horizontal / Vertical beam	360° / 3°
Luminous intensity	20 000 Cd Day 2 000 Cd Night
Flash frequency	20 to 60 fpm
MTBF	100 000 hours
ELECTRICAL	
Voltage	48V DC / 110 to 240V AC
Operating temperature	-20°C to +55°C
Consumption (day mode)	< 40 Watts at 20 fpm
Consumption (night mode)	< 15 Watts at 20 fpm
Current I _{max} (day mode)	In 48V: I = 4 400mA In 230V: I < 1 000mA
Current I _{max} (night mode)	In 48V: I = 1 400mA In 230V: I < 350mA
Protection class	IP66
MECHANICAL	
Box material	Zamac
Body lamp material	Aluminum
Lens material	Polycarbonate
Mounting	M8 screw (in option)
Height / Width	410mm / 410mm
Weight	< 18 Kg
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
FAA	Compliant FAA L-864 / L-865
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

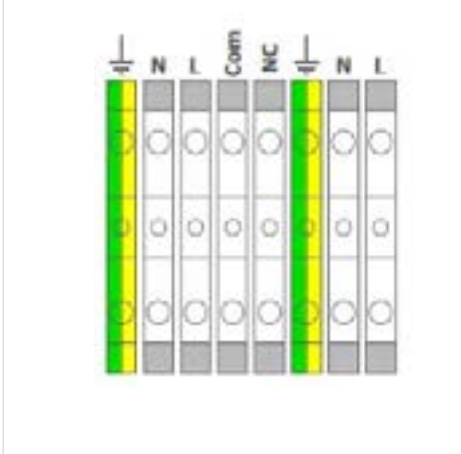
+ AVAILABLE VERSIONS

180° VERSION	
	The number of LEDs is divided by two for beacons that need to flash only over a 180° horizontal beam. It enables to decrease the power consumption.

DIMENSIONS

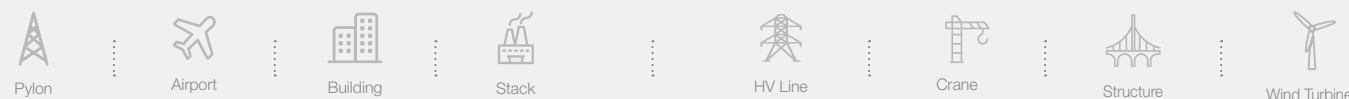


WIRING



AVAILABLE ACCESSORIES FOR INSTALLATION

- Power supply
- UPS System
- Solar kit
- Type "L" fixation mountings



MEDIUM INTENSITY OBSTRUCTION LIGHT DUAL TYPE A & C

WHITE FLASH (20 000 CD DAY / 20 000 CD TWILIGHT) + RED STEADY BURN (2 000 CD NIGHT)



01. DESCRIPTION

The **LEDEO MIAC** is a medium intensity beacon equipped with the multi-LEDs technology. Dedicated to a day (white flash) and night (red flash) beaconing, it is a long life beacon (100 000 hours), very robust and with a low consumption (<50W). A photocell and a dry contact can be provided either in the light or deported in a control cabinet (safety power supply or conventional control panel). It can be solar power supplied and has been designed for an easy installation.

02. ADVANTAGES

- Integrated synchronization wire (optical fiber, GPS and TCPIP available)
- Long life time > 10 years
- Multi-LEDs technology
- Low consumption < 50W
- DELTA BOX exclusive self-test included with photocell
- No maintenance
- 2-year warranty
- Zamac box with epoxy power painting
- IP66



03. APPLICATIONS

Rules concerning aircraft beaconing are established by the ICAO (Annex 14, Chapter 6). Medium Intensity lights can be installed on structures from 45 to 150 meters tall, with an intermediary level of marking. According to the rules, an uninterruptible power supply cabinet has to be installed to insure a 12 hours of beaconing in case of power supply failure.

04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LMIAC01BB*	48V DC	Not included	Included
LMIAC11BB	48V DC	Included	Included
LMIAC01MB*	110-240V AC	Not included	Included
LMIAC11MB	110-240V AC	Included	Included

* to be used with an external DELTA BOX photocell



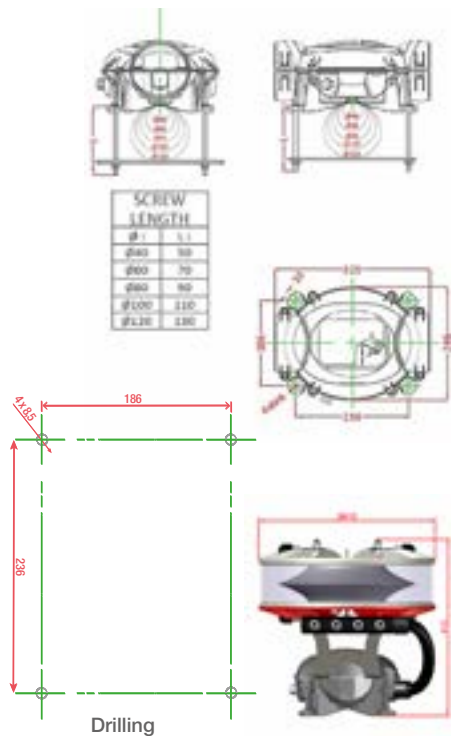
05. CHARACTERISTICS

LUMINOUS	
Luminous source	White flashing / Red steady burning LEDs
Horizontal / Vertical beam	360° / 3°
Luminous intensity	20 000 Cd (Day, white) 2 000 Cd (Night, red)
Flash frequency	20 to 60 fpm
MTBF	100 000 hours
ELECTRICAL	
Voltage	48V DC / 110 to 240V AC
Operating temperature	-20°C to +55°C
Consumption	< 50 Watts
Current I _{max} (day mode)	In 48V: I = 4 400mA In 230V: I < 1 000mA
Current I _{max} (night mode)	In 48V: I = 1 400mA In 230V: I < 350mA
Protection class	IP66
MECHANICAL	
Box material	Zamac
Body lamp material	Aluminum
Lens material	Polycarbonate
Mounting	M8 screw (in option)
Height / Width	410mm / 410mm
Weight	< 18 Kg
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
FAA	Compliant FAA L-864 / L-865
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

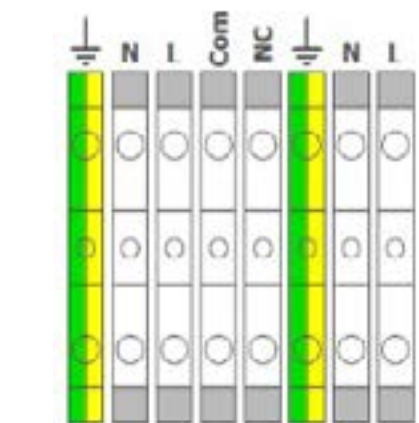
+ AVAILABLE VERSIONS

180° VERSION	
	The number of LEDs is divided by two for beacons that need to flash only over a 180° horizontal beam. It enables to decrease the power consumption.

DIMENSIONS



WIRING



AVAILABLE ACCESSORIES FOR INSTALLATION

- Power supply
- UPS System
- Solar kit
- Type "L" fixation mountings

OBSTRUCTION MEDIUM INTENSITY LIGHT EXPLOSION PROOF

RED FLASH – 2 000 CD NIGHT (TYPE B)



01. DESCRIPTION

The **SMIB ATEX** version is a medium intensity beacon particularly adapted to dangerous environments. With an explosion proof body and a Multi-LEDs technology, it is dedicated to the night beaconing of obstacles in industrial areas. The beacon has a long lifetime (100 000 hours) and a very low consumption (<6W).

The SMIB ATEX can be provided with a photocell for an automatic switch ON/OFF, and a dry contact for failure alarm. It has been designed for an easy installation.

02. ADVANTAGES

- Long life time > 10 years
- Explosion proof capsule cap (IP Class IP67)
- Low consumption < 6W
- Integrated synchronization wire (optical fiber, GPS and TCPIP available)
- DELTA BOX exclusive self-test when the photocell is integrated
- External LED for visual diagnostic
- Modulation of consumption according to exterior T°C
- Connection box integrated to the light
- No maintenance
- 2-year warranty

03. APPLICATIONS

Rules concerning aircraft beaconing are established by the ICAO (Annex 14, Chapter 6). Medium Intensity lights can be installed on structures from 45 to 150 meters tall, with an intermediary level of marking. According to the rules, an uninterruptible power supply cabinet has to be installed to insure a 12 hours of beaconing in case of power supply failure.

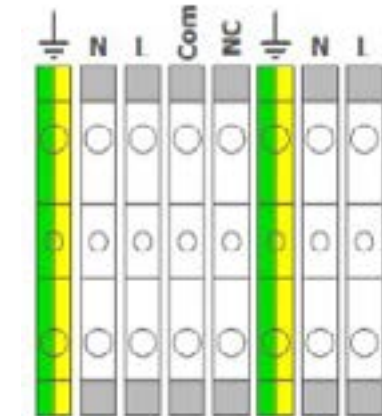
04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
SMIB01AX	24V DC	Not included	Included
SMIB11AX	24V DC	Included	Included
SMIB01BX	48V DC	Not included	Included
SMIB11BX	48V DC	Included	Included
SMIB01MX	230V AC	Not included	Included
SMIB11MX	230V AC	Included	Included

05. CHARACTERISTICS

LUMINOUS	
Luminous source	Red flashing LEDS
Horizontal / Vertical beam	360° / 3°
Luminous intensity	2 000 Cd
Flash frequency	20 to 60 fpm
MTBF	100 000 hours
ELECTRICAL	
Voltage	24V DC / 48V DC / 110 to 240V AC
Lightning protection	Integrated
Operating temperature	-45°C to +55°C
Consumption	6 Watts at 20 fpm
Current I _{max}	In 24V: I = 3 A In 48V: I = 1,5 A In 230V: I = 0,32 A
Protection class	IP67
MECHANICAL	
Body material	Aluminum cast
Lens material	Borosilicate Glass
Height / Width	350mm / 320mm
Weight	< 14 Kg
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
FAA	Compliant FAA L-864
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

WIRING



AVAILABLE ACCESSORIES FOR INSTALLATION

- Stainless steel mounting
- Driving box
- Power supply
- Safety power supply
- Solar kit



MEDIUM INTENSITY OBSTRUCTION LIGHT TYPE B

RED FLASH (2 000 CD NIGHT) + INFRARED



01. DESCRIPTION

The LEDEO SMIB IR is a medium intensity combining Red & Infrared LEDs and provided with a base designed for a natural fresh cooling. Dedicated to a night beaconing (red flash), it is a long life time system (100 000 hours), with a robust design and a low consumption (7W at 20 flashes/minute). The LEDEO SMIB IR is provided with a photocell for an automatic switch ON/OFF, and a dry contact for failure alarm. It can be solar power supplied and has been designed for an easy installation.

02. ADVANTAGES

- Provided with IR technology for visibility with night vision glasses
- Integrated synchronization wire (optical fiber, GPS and TCPIP available)
- Long life time > 10 years
- Low consumption 7W (20 flashes/minute)
- DELTA BOX exclusive self-test included with photocell
- No maintenance
- Zamac box with epoxy powder painting
- IP66
- Light and compact design for an easy installation
- External LED for visual diagnostic
- Modulation of consumption according to exterior T°C
- Connection box integrated in the light
- 2-year warranty

03. CHARACTERISTICS

LUMINOUS	
Luminous source	Red flash LEDs
Horizontal / Vertical beam	360° / 3°
Luminous intensity	2 000 Cd
Flash frequency	20 to 60 fpm
MTBF	100 000 hours
ELECTRICAL	
Voltage	24V DC / 48V DC / 110 to 240V AC
Operating temperature	-45°C to +55°C
Consumption	7 Watts at 20 fpm
Current I _{max}	In 48V: 1,8 A In 230V: 0,4 A
Protection class	IP66
MECHANICAL	
Box material	Zamac
Lens material	Polycarbonate
Mounting	M6 screw (included)
Height / Width	284mm / 235mm
Weight	< 5 Kg
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
FAA	Compliant FAA L-864
Quality	ISO 9001 : 2015
WARRANTY	
Warranty period	2 years

04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
SMIBIR01AB	24V DC	Not included	Included
SMIBIR11AB	24V DC	Included	Included
SMIBIR01BB	48V DC	Not included	Included
SMIBIR11BB	48V DC	Included	Included
SMIBIR01MB	110-240V AC	Not included	Included
SMIBIR11MB	110-240V AC	Included	Included

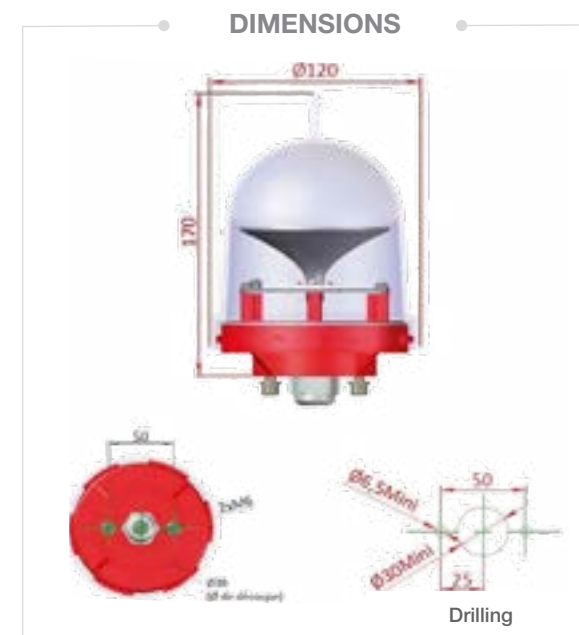
OBSTRUCTION LIGHT

INFRARED MODULE FOR MEDIUM & HIGH INTENSITY LIGHTS



01. DESCRIPTION

The LMIR is based on infrared technology. Used as an additional device in combination with a medium or high intensity light, the IR technology enables visibility with night vision glasses. It is a long life beacon (100 000 hours), very strong, with a low consumption (<5W). The LMIR is directly powered by the obstruction light and will follow the same flash and frequency than the light.



02. CHARACTERISTICS

LUMINOUS	
Luminous source	Red LEDs
Horizontal / Vertical beam	360° / 180°
Luminous intensity	500 mW/sr min between 0° / +2° 1 000 mW/sr max between -90° / +90°
Wave length infra-red LEDs	860 nm 100% relative intensity
MTBF	100 000 hours
ELECTRICAL	
Voltage	48V
Operating temperature	-55°C to +55°C
Consumption	< 5 Watts max.
Current I _{max}	I = 100mA
Protection class	IP66
Cable	2 meters
MECHANICAL	
Body material	Composite
Lens material	Polycarbonate with bird spike
Mounting	M6 screw (included)
Height / Width	170mm / 120mm
Weight	< 1 Kg
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
Quality	ISO 9001 ; 2015



HIGH INTENSITY OBSTRUCTION LIGHT TYPE A

WHITE FLASH – 200 000 CD DAY / 20 000 CD TWILIGHT / 2 000 CD NIGHT



01. DESCRIPTION

The **LEDEO HIA** is a high intensity light with multi-LEDs technology, developed with an aluminum frame for a natural fresh cooling system. Dedicated to a day, twilight and night marking, it is a long life system, with a modular conception to reduce the weight of the flash head. The LEDEO HIA is provided with a control panel including the photocell for an automatic switch ON / OFF, and a dry contact for failure alarm. It has been designed for an easy installation.

02. ADVANTAGES

- 120° horizontal beam spread
- Integrated synchronization wire (optical fiber, GPS and TCPIP available)
- Long life time up to 10 years
- Aluminum design for natural cooling system
- Multi-LEDs technology
- Low Consumption <150W at 40 fpm
- Mounting frame included
- No maintenance
- 2-year warranty

03. APPLICATIONS

Rules concerning aircraft beaconing are established by the ICAO (Annex 14, Chapter 6). High intensity beacons can be installed on structures higher than 150 meters in height. According to the rules, an uninterruptible power supply cabinet must be installed to insure 12 hours of beaconing in case of power supply failure.

04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LHIA-TF	110-240V	Not included	Not included
AA-LHIA-A230	110-240V	Included	Included

05. CHARACTERISTICS

LUMINOUS	
Luminous source	White flash LEDS
Horizontal / Vertical beam	120° / 3°
Luminous intensity	200 000 Cd Day 20 000 Cd Twilight 2 000 Cd Night
Flash frequency	20 to 60 fpm
MTBF	100 000 hours
ELECTRICAL	
Voltage	110 to 240V AC
Operating temperature	-40°C to +55°C
Consumption	< 150 Watts at 40 fpm
Current I _{max}	In 48V: I < 18A (120°) In 230V: I < 4A (120°)
Protection class	IP66
MECHANICAL	
Body lamp material	Aluminum
Lens material	Glass
Height / Length	500mm / 640mm
Weight	< 20 Kg
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
FAA	Compliant FAA L-856
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

DIMENSIONS



AVAILABLE ACCESSORIES FOR INSTALLATION

- Power supply
- UPS System
- Solar kit
- GPS Synchronization, Optical Fiber



Pylon



Airport



Building



Stack



HV Line



Crane



Structure



Wind Turbine

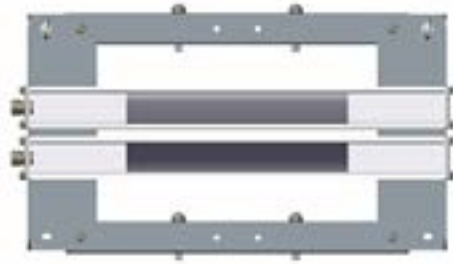
HIGH INTENSITY OBSTRUCTION LIGHT TYPE B

WHITE FLASH – 100 000 CD DAY / 20 000 CD TWILIGHT / 2 000 CD NIGHT



01. DESCRIPTION

The **LEDEO HIB** is a high intensity light with multi-LEDs technology, developed with an aluminum frame for a natural fresh cooling system. Dedicated to a day, twilight and night marking, it is a long life system, with a modular conception to reduce the weight of the flash head. The LEDEO HIB is provided with a control panel including the photocell for an automatic switch ON / OFF, and a dry contact for failure alarm. It has been designed for an easy installation.



02. ADVANTAGES

- 120° horizontal beam spread
- Integrated synchronization wire (optical fiber, GPS and TCPIP available)
- Long life time up to 10 years
- Multi-LEDs technology
- Low Consumption <75W at 40 fpm
- Mounting frame included
- No maintenance
- 2-year warranty

03. APPLICATIONS

Rules concerning aircraft beaconing are established by the ICAO (Annex 14, Chapter 6). High intensity beacons can be installed on structures higher than 150 meters in height. According to the rules, an uninterruptible power supply cabinet must be installed to insure 12 hours of beaconing in case of power supply failure.

04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LHIB-TF	110-240V	Not included	Not included
AA-LHIB-A230	110-240V	Included	Included

05. CHARACTERISTICS

LUMINOUS	
Luminous source	White flash LEDS
Horizontal / Vertical beam	120° / 3°
Luminous intensity	100 000 Cd Day 20 000 Cd Twilight 2 000 Cd Night
Flash frequency	20 to 60 fpm
MTBF	100 000 hours
ELECTRICAL	
Voltage	110 to 240V AC
Operating temperature	-40°C to +55°C
Consumption	< 75 Watts at 40 fpm
Current I _{max}	In 48V: I < 8,5A (120°) In 230V: I < 2A (120°)
Protection class	IP66
MECHANICAL	
Body lamp material	Aluminum
Lens material	Glass
Height / Length	370mm / 640mm
Weight	< 15 Kg
WEIGHT	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
FAA	Compliant FAA L-857
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

DIMENSIONS



AVAILABLE ACCESSORIES FOR INSTALLATION

- Power supply
- UPS System
- Solar kit
- GPS Synchronization, Optical Fiber



OBSTRUCTION LIGHT POWER SUPPLY POWER SUPPLY CONTROL PANEL

230V/48V – 230V/230V – 400V/48V

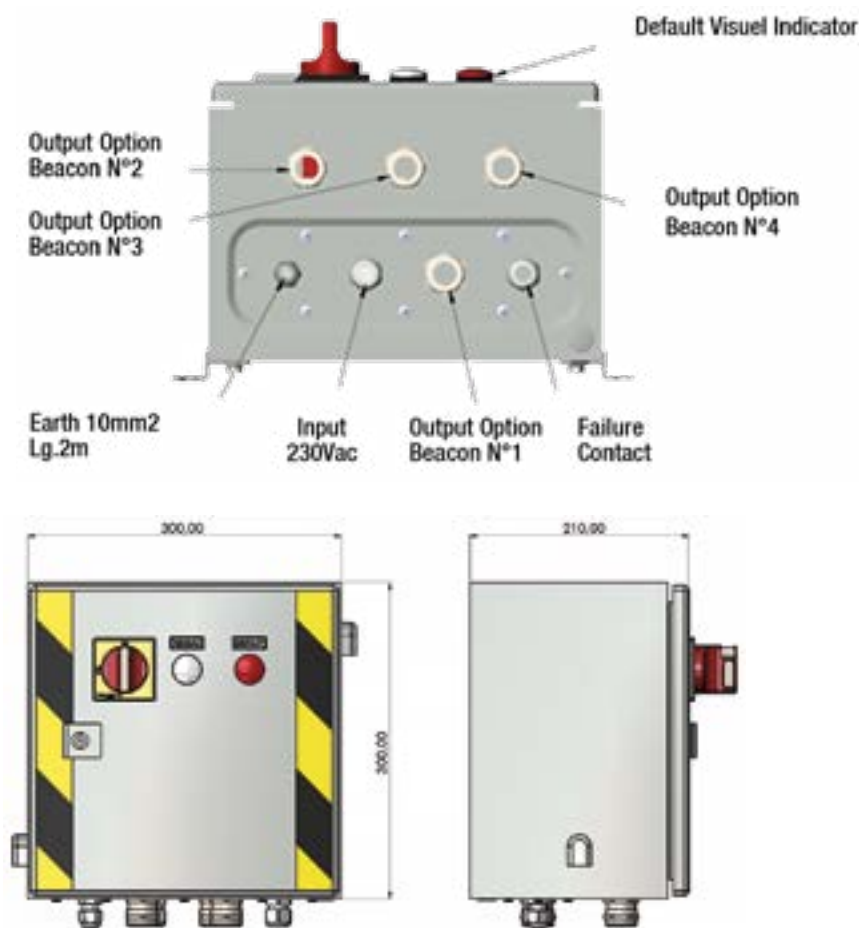


01. DESCRIPTION

Our range of control panels is designed to power supply any Obstruction Light, on any type of installation. It integrates all the necessary electric protections. The beacons can be wired in series or in a star configuration. In standard version, the control panel is equipped with an ON/OFF switch, an input lightning protection and one default visual indicator for the Main Power Supply. In option, it is possible to have additional default visual indicators and buttons or switches.

02. ADVANTAGES

- Cabling customized by DELTA BOX in its factory to match the requirements of your project
- IP66 Structure
- 2-year Warranty
- Input Lightning Protection
- Painted Steel



* The visual elements are for guidance only. The size of the power supply control panel can change depending on the options needed.

03. CHARACTERISTICS

Reference	AAMB-10AF-75W	AAMB-10AF-500W	AAMB-10AF-1000W	AAMM-10AF	AA-A400C048-10AF
APPLICATIONS					
Maximum number of beacons	25 L.I. type A 12 L.I. type B 1 M.I. type B or C	160 L.I. type A 80 L.I. type B 1 M.I. type A or AB 6 M.I. type B or C	3 M.I. type A or AB 12 M.I. type B or C	To be determined according to the installation	1 M.I. type A or AB 6 M.I. type B or C
TECHNICAL CHARACTERISTICS					
ELECTRICAL					
Input Standard Voltage	110-240V			400V	
Output Standard Voltage	48V			110/240V 48V	
Functioning Temperature	-55°C à +55°C				
MECHANICAL					
Type of Control Panel	1	1 or 2	3	1 or 2	2
Control Panel Material	Painted Steel		Polyester	Painted Steel	Polyester
Fixation	With exterior legs				
Protection class	IP66				
ENVIRONMENTAL					
Humidity	80%				
Wind Speed	160 Km/h				
CERTIFICATIONS					
CE	EN60947-1 ; CEI60364, NF C15-100 ; 2014 / 35 / UE				
Quality	ISO 9001 ; 2015				
WARRANTY					
Warranty Period	2 years				
DIMENSIONS AND WEIGHT					
TYPE 1		TYPE 2		TYPE 3	
300x300x210mm – 7 kg		380x380x210mm – 10 kg		500x400x260mm – 6 kg	
TYPE 4*		TYPE 5*		TYPE 6*	
600x600x250mm – 16 kg		700x500x250mm – 31 kg		1000x760x300mm – 56 kg	

* For customized applications



OBSTRUCTION LIGHT POWER SUPPLY SAFEBOX

UNINTERRUPTIBLE POWER SUPPLY



01. DESCRIPTION

Our **Uninterruptible Power Supply** cabinet is dedicated to ensure 12 hours of autonomy in case of main power supply failure. The SAFEBOX is a UPS solution optimized for obstruction lights based on high quality batteries. The SAFEBOX is available with a 110-240V input and a 48V or 110-240V output. In standard version, it is equipped with an ON/OFF switch, an input lightning protection and one default visual indicator for the Main Power Supply. In option, it is possible to have additional default visual indicators and buttons or switches.

02. ADVANTAGES

- Compact
- IP66 structure
- Functional status and charging indication on the front of the cabinet
- 12 hours autonomy
- 2-year warranty

03. MODELS

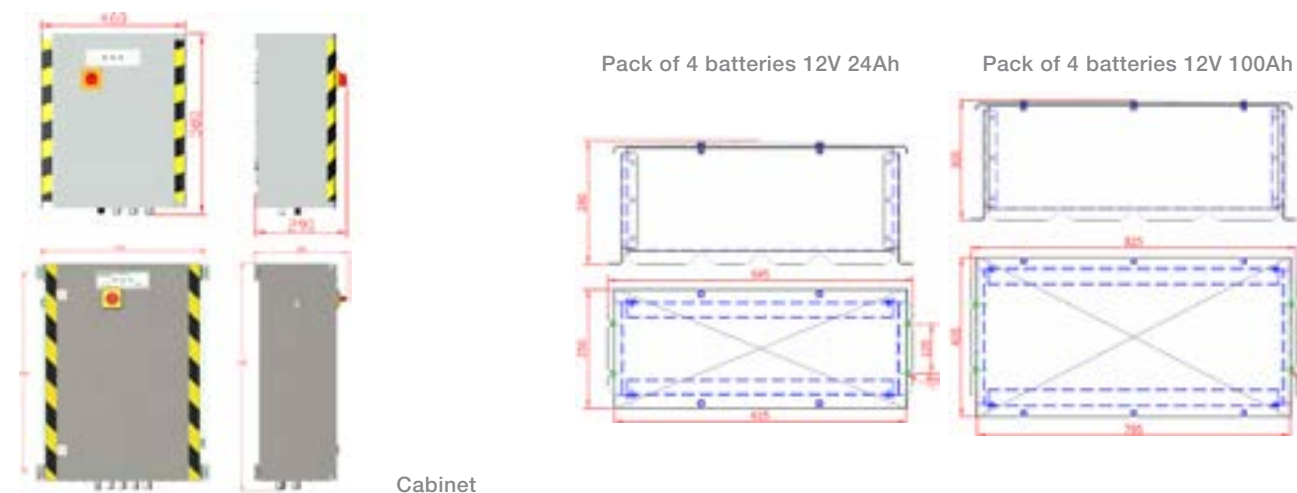


REFERENCE	POWER SUPPLY	BATTERY PACK	CAPACITY
SBMCBI4-10	230 / 48V	4 Batteries 12V 7Ah	10 LBIA or 4 LBIB
SBMCBI8-20	230 / 48V	4 Batteries 12V 12Ah	20 LBIA or 8 LBIB
SBMCM11	230 / 48V	4 Batteries 12V 24Ah	1 LMIA or 4 LMIB
SBMCM12	230 / 48V	8 Batteries 12V 24Ah	2 LMIA or 8 SMIB
SBMCM13	230 / 48V	4 Batteries 12V 100Ah	3 LMIA or 12 SMIB
SBMMMI1	230 / 48V	4 Batteries 12V 24Ah	1 LMIA or 4 SMIB
SBMMMI2	230 / 48V	8 Batteries 12V 24Ah	2 LMIA or 8 SMIB
SBMMMI3	230 / 48V	4 Batteries 12V 100Ah	4 LMIA or 16 LMIB

04. CHARACTERISTICS

MODELS & TECHNICAL CHARACTERISTICS									
Reference	SBMCBI4-10	SBMCBI8-20	SBMCM11	SBMCM12	SBMCM13	SBMMMI1	SBMMMI2	SBMMMI3	
ELECTRICAL									
Input Voltage	110-240V (48V or 400V available)								
Output Voltage	48V or 110-240V								
Operating T°C	-10°C à +55°C								
Autonomy	12 hours								
Battery	AGM								
MECHANICAL (CABINET)									
Body Material	Polyester			Painted Steel					
Mounting	With external mounting bracket (not included)								
Dimensions	580x460x290 (mm)			700x500x290 (mm)					
Weight	20 kg	24 kg	37 kg			55 kg			
Protection class	IP66								
MECHANICAL (BATTERY PACK)									
Body Material	Aluminum								
Number of rack	1	1	1	2	1	1	2	1	
Dimensions per rack (mm)	Integrated in the cabinet			645x250x260	825x405x305	Integrated in the cabinet		645x250x260	825x405x305
Total Weight	8,8 kg	15,2 kg	40 kg	80 kg	140 kg	40 kg	80 kg	140 kg	
Protection class	IP 66								
ENVIRONMENTAL									
Humidity	80%								
Wind Speed	160 Km/h								
CERTIFICATIONS									
CE	EN60947-1 ; CEI60364, NF C15-100 ; 2014 / 35 / UE								
Quality	ISO 9001 ; 2015								
WARRANTY									
Warranty	2 years (excluding batteries)								

DIMENSIONS OF THE CABINET



Pylon



Airport



Building



Stack



HV Line



Crane



Structure



Wind Turbine

CONDUCTOR MARKING LIGHT

LOW INTENSITY TYPE A & B

RED STEADY BURN – 10 CD NIGHT (TYPE A) OR 32 CD NIGHT (TYPE B)



01. DESCRIPTION

The **LEDEO BHT** is a one assembly low intensity light dedicated to the beaconing of high voltage lines. It operates with a current transformer that uses the electro-magnetic field of the line to power up the LEDs. It is an autonomous and long lifetime system (100 000 hours), which design has been proven worldwide. With only one reference serving all the power line capacities, its compact design and light weight allow the quickest and easiest installation on the market.

02. ADVANTAGES

- Self-powered and autonomous system
- Proven design in operation worldwide
- Self-centered on the conductor cable thanks to a specific nut
- Product completely filled with resin to avoid vibration issues on the electronics
- Only 1 reference for all line voltage capacities
- No corona effect
- Installation time reduced
- No maintenance required
- 2-year warranty



03. APPLICATIONS

The **LEDEO BHT** complies with the ICAO regulations as it is power supplied by the magnetic field around the cable of the high voltage line. The light can be used for beaconing high voltage lines up to 500kV. The installation specifications for high voltage overhead cables are mainly dealing with the intervals between two beacons:

- 70 meters for sensitive specification location in the vicinity of an airport
- 105 meters for other locations

Moreover, the light must be installed at more than 10 meters from the closest supporting tower.



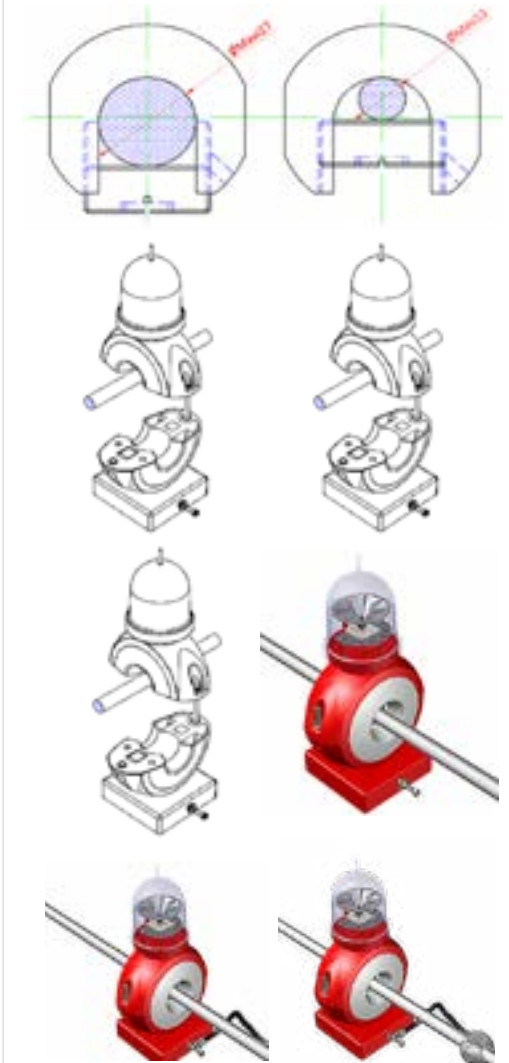
04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LBIA00HT	1V to 500kV	Not included	Not included
LBIB00HT	1V to 500kV	Not included	Not included

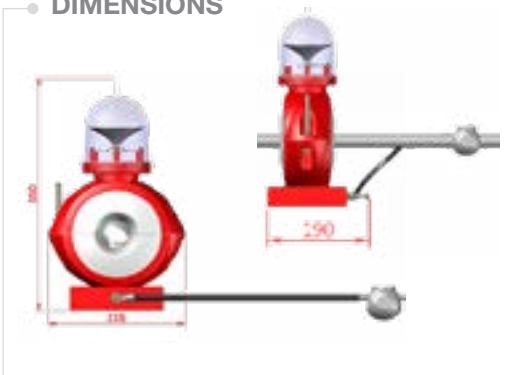
05. CHARACTERISTICS

	TYPE A	TYPE B
LUMINOUS		
Luminous source	Red LEDs	
Horizontal / Vertical beam	360° / 10°	
Luminous intensity	> 10 Cd	> 32 Cd
MTBF	100 000 hours	
ELECTRICAL		
Voltage	1V to 500kV	
Operating temperature	55°C to +55°C	
Current Imin	7A	
Current	10A	
Current Imax	1000A	
Protection class	IP66	
MECHANICAL		
Body material	ABS	
Lens material	Polycarbonate with bird spike	
Mounting	Fixation nuts	
Height / Width	380mm / 215mm	
Weight	< 6 Kg	
ENVIRONMENTAL		
Humidity	100%	
Frost	-60°C	
Wind speed	240 Km/h	
CERTIFICATIONS		
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE	
OACI	Annex 14, Volume I, Chapter 6	
Quality	ISO 9001 ; 2015	
WARRANTY		
Warranty period	2 years	

INSTALLATION



DIMENSIONS



AIRCRAFT WARNING SPHERES

RED - WHITE - ORANGE



01. DESCRIPTION

Our **warning sphere** is a diurnal marking ball installed on high voltage lines and pylon stays. Very light and resistant to severe weather conditions (extreme cold or high solar exposure), the warning sphere is available in red, white or orange.

The sphere can be adapted on any diameter of Earth cable and thanks to its silicon clamping system, does not require any armor rod to be fixed on the cable.

02. ADVANTAGES

- Exclusive silicon clamping system to ensure stability on the line
- Proven design in operation worldwide, no damage to the cable
- Weather resistant (extreme cold and high solar exposure)
- Physical property retention after UV exposure
- Color stability
- Practical toughness and rigidity
- Dimensional stability
- Adaptable to any diameter of cable or conductor

03. MODELS

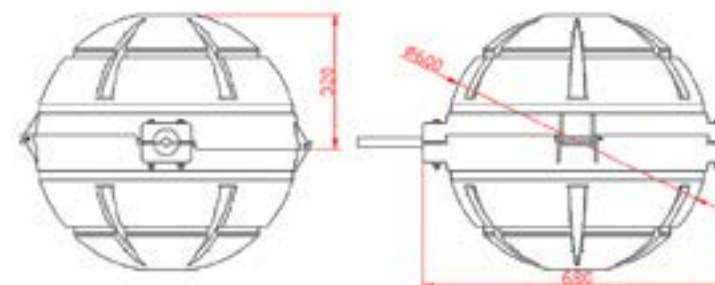
REFERENCE*	COLOR	JAW 07MM (CABLE FROM 10 TO 15MM)	JAW 12MM (CABLE FROM 15 TO 20MM)	JAW 18MM (CABLE FROM 20 TO 26.4MM)
WS60R-d07	RED	X		
WS60R-d12	RED		X	
WS60R-d18	RED			X
WS60W-d07	WHITE	X		
WS60W-d12	WHITE		X	
WS60W-d18	WHITE			X
WS60O-d07	ORANGE	X		
WS60O-d12	ORANGE		X	
WS60O-d18	ORANGE			X

* More references are available for cables of smaller or bigger diameter

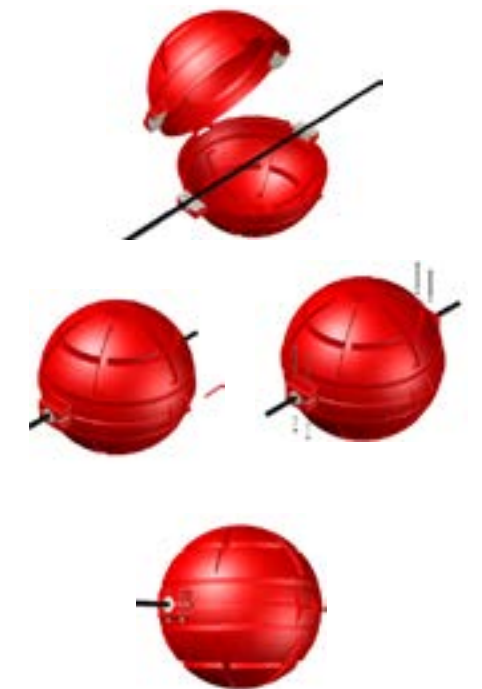
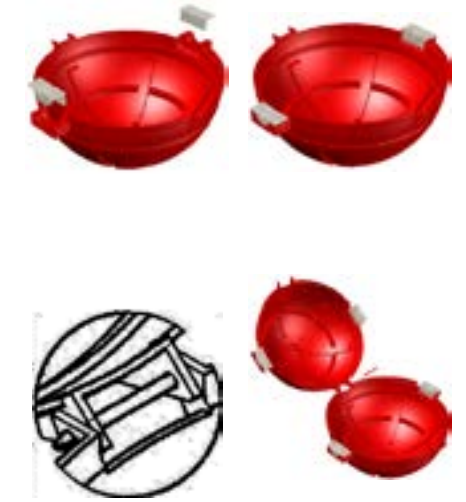
04. CHARACTERISTICS

MECHANICAL	
Body material	Composite
Color	Red, White, Orange
Mounting	Screws (Included)
Diameter	600mm
Thickness	3mm
Weight	< 5 Kg
Operating temperature	-55°C to +55°C
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

DIMENSIONS



INSTALLATION



AIRPORTS & HELIDECKS EQUIPMENT



AIRPORT EQUIPMENT

STNA (ICAO) WIND DIRECTOR INDICATOR

7.40 METERS



01. DESCRIPTION

The **STNA WDI** is our ICAO compliant mast. This tilting mast measures 7,40 Meters and is equipped with 3 braces to ensure its stability. The standard wind vanes are 60 or 100 cm diameter, but other diameters are also available. The wind vane support is equipped with two auto-lubricated Teflon rings to allow its rotation. This system is very resistant to wear phenomena, and doesn't require any maintenance, therefore offering an exceptional long life time.

In option, the WDI can be manufactured in stainless steel, aluminum or fiber glass. A frangible ring can be added at the bottom of the pole for frangibility, and different power supply versions are available (solar, 230V, 6.6A).

02. MODELS

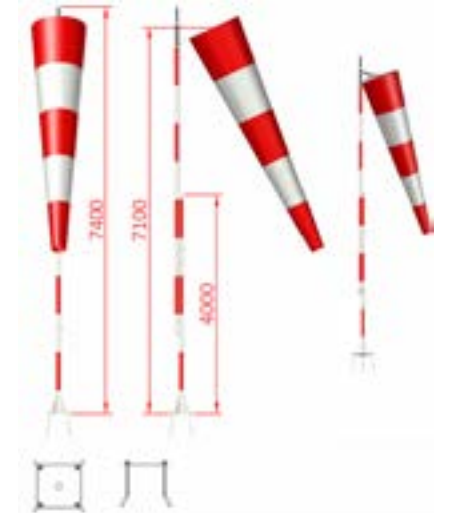
REFERENCE	WIND VANE DIAM.	POWER SUPPLY	POLE + WIND VANE	INTERNAL LIGHTING	OBSTACLE LIGHT	WIND SOCK
STNABG60	60 cm		✗			
STNABG60M	60 cm		✗			✗
STNABG100	100 cm		✗			
STNABG100M	100 cm		✗			✗
STNABG60E2L	60 cm	230V	✗	✗		
STNABG100E2L	100 cm	230V	✗	✗		
STNABG60E6L	60 cm	6,6A	✗	✗		
STNABG100E6L	100 cm	6,6A	✗	✗		
STNABG60C2L	60 cm	230V	✗	✗	✗	✗
STNABG100C2L	100 cm	230V	✗	✗	✗	✗
STNABG60C6L	60 cm	6,6A	✗	✗	✗	✗
STNABG100C6L	100 cm	6,6A	✗	✗	✗	✗

REFERENCE	DESIGNATION
LBIA-HMA-6.6A	Low intensity Obstacle Light Type A for WDI 6.6A
LBIA-HMA-C048	Low intensity Obstacle Light Type A for WDI 110-240V
LMA00BB	Windsock internal lighting
MA-FRANGIBLE	Frangible part at the bottom of the mast

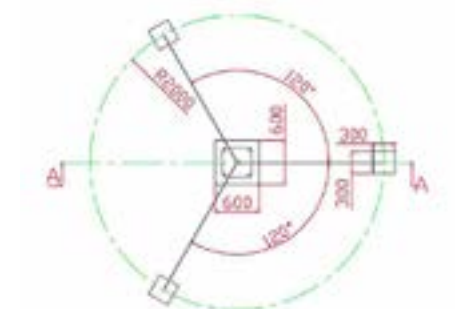
03. CHARACTERISTICS

MECHANICAL	
Height	7.40 meters
Tiltable part	Yes
Protection	Galvanized steel + White epoxy paint
Paint	Red & White
Mounting	Anchorage Block (Included)
Wind vane	Helipads: Diameter 60cm or 90cm
	Airports: Diameter 100cm
Braces	3 x 120°
Anchorage Block	600 x 600 x 800 mm
WEIGHT	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 6
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years
ELECTRICAL	
Power supply	6.6A / 230V / 12V (Solar)
Operating temperature	-55°C to +55°C
Consumption	3 Watts (obstacle light)
	30 Watts (external light)
Protection Class	IP66
OPTIONS	
Reinforced mast	✓
Obstacle Light	✓
External lighting by 4 Leds Floodlights (230V or 6.6A) Consumption < 4 x 5.2 W	✓
Frangibility of the mast	✓
Solar power supply	✓
Stainless steel / Aluminum / Fiber Glass manufacture	✓

DIMENSIONS



Concrete Foundations



Hoist (in option)

STAINLESS STEEL WINDVANE



AIRPORT EQUIPMENT

FAA WIND DIRECTION INDICATOR

3 OR 6 METERS



01. DESCRIPTION

Our **FAA WDI** is compliant to the FAA rules. It is manufactured in galvanized steel with an orange paint and is available in 3 or 6 meters. The 3M WDI is tiltable at the base of the mast and the 6M WDI is tiltable in the middle of the mast.

3 diameters of preformed wind vane are proposed together with the suitable windsocks. The wind vane support is equipped with two auto-lubricated teflon rings to allow its rotation. This system is very resistant to wear phenomena, and doesn't require any maintenance, therefore offering an exceptional life time.

Various options are available such as the windsock lighting (internal or external) and the topmast Obstacle Light. These options can operate under different power supplies: 24-48V, 230V, Solar but also in 6,6 A.

02. MODELS

REFERENCE	3 METERS	6 METERS	WIND VANE DIAMETER	
			CM	INCHES
FAA3-BG30	✓		30	12'
FAA3-BG45	✓		45	18'
FAA3-BG60	✓		60	24'
FAA6-BG45		✓	45	18'
FAA6-BG60		✓	60	24'
FAA6-BG90		✓	90	36'



3 METERS

6 METERS



Hoist (in option)



External Lighting + Obstacle Light

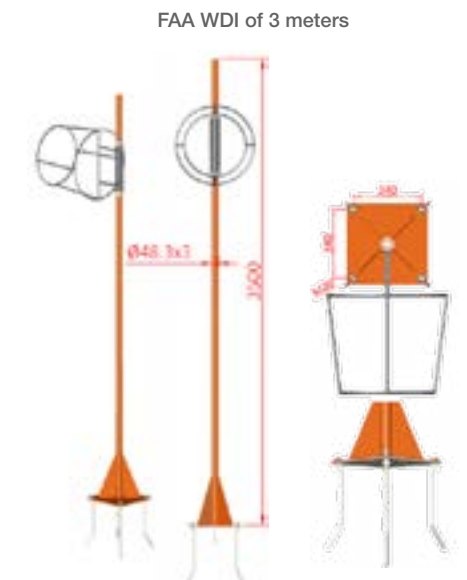


Solar power supply

03. CHARACTERISTICS

MECHANICAL	
Height	3 or 6 meters
Tiltable part location	Base (3 meters WDI) or Middle (6 meters WDI)
Protection	Galvanized steel
Paint	Orange
Mounting	Anchorage Block (Included)
Anchorage Block	600 x 600 x 800 mm
Preformed wind vane	30 / 60 / 90 cm
Braces	No
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
FAA	Compliant
Quality	ISO 9001 ; 2008
Warranty	1 year
ELECTRICAL	
Power supply	6.6A / 230V / 12V (Solar)
Operating temperature	-55°C to +55°C
Consumption	3 Watts (obstacle light)
	30 Watts (external light)
Protection Class	IP66
OPTIONS	
Reinforced mast	✓
Obstacle Light	✓
External lighting by 4 Leds Floodlights (230V or 6.6A) Consumption < 4 x 5.2 W	✓
Paint	Red & White or Yellow
Frangibility of the mast	✓
Solar power supply	✓
Stainless steel / Aluminum / Fiber Glass manufacture	✓

DIMENSIONS



FAA WDI of 3 meters



FAA WDI of 6 meters

AVAILABLE ACCESSORIES FOR INSTALLATION

- Windsock
- Solar power supply



Pylon



Airport



Building



Stack



HV Line



Crane



Structure



Wind Turbine



01. DESCRIPTION

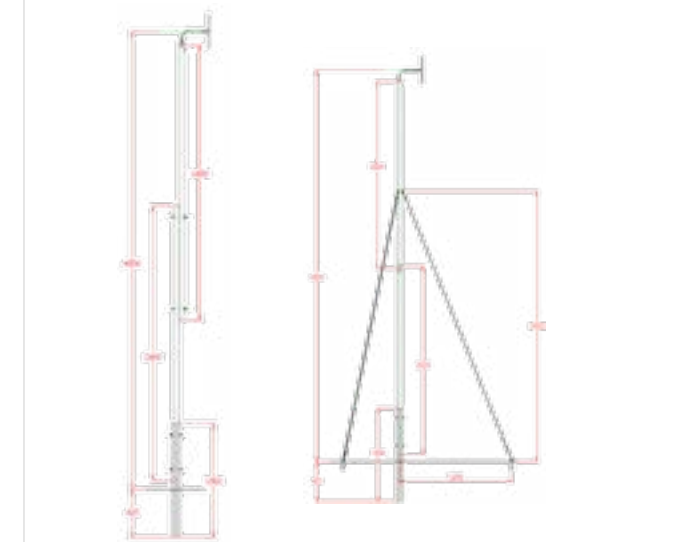
The **Simple Mast** consists in a 4 meters pole that can be fixed, provided with braces, or tiltable. 2 mounting frames in "U" enable an easy and quick installation. In its standard version, the mast is in galvanized steel painted in white color.

It is provided with a stainless steel wind vane to be installed at the top of the mast. The wind vane support is equipped with two auto-lubricated Teflon rings to allow its rotation. This system is very resistant to wear phenomena, and doesn't require any maintenance, therefore offering an exceptional long life time. Three diameters of wind vanes are available with their suitable windsocks.

02. MODELS

REFERENCE	WIND VANE DIAMETER	TILTABLE	FIXED
MASBG30	30 cm	X	
MASBG40	40 cm	X	
MASBG50	50 cm	X	
MASFG30	30 cm		X
MASFG40	40 cm		X
MASFG50	50 cm		X

DIMENSIONS



01. DESCRIPTION

Our **windsocks** are in compliance with the International Civil Aviation rules. The windsocks are handmade in France with a high quality fabric, qualified with 160g/m². With a specific U.V treatment the color fastness is warranted.

They offer high resistance to the weather and to the sun. The standard colors available are red and white, or orange. More colors are available. Your logo can be added.

02. CHARACTERISTICS

WINDSOCKS	
Dye	Colourfast
Assembly	In 5 sections
Mounting	By synthetic clamp collars
Grammage	160g/m ²

03. MODELS

REFERENCE	DIMENSIONS (CM)	DIMENSIONS (INCH)	COLOUR
DBM-SE-30-120-RB	30 x 120	12' x 47'	Red and white
DBM-SE-30-180-RB	30 x 180	12' x 71'	Red and white
DBM-SE-40-250-RB	45 x 250	18' x 99'	Red and white
DBM-SE-50-225-RB	50 x 225	20' x 89'	Red and white
DBM-SE-60-240-RB	60 x 240	24' x 95'	Red and white
DBM-SE-90-360-RB	90 x 360	36' x 141'	Red and white
DBM-SE-100-450-RB	100 x 450	40' x 178'	Red and white
DBM-SE-30-120-OR	30 x 120	12' x 47'	Orange
DBM-SE-30-180-OR	30 x 180	12' x 71'	Orange
DBM-SE-40-250-OR	45 x 250	18' x 99'	Orange
DBM-SE-50-225-OR	50 x 225	20' x 89'	Orange
DBM-SE-60-240-OR	60 x 240	24' x 95'	Orange
DBM-SE-90-360-OR	90 x 360	36' x 141'	Orange
DBM-SE-100-450-OR	100 x 450	40' x 178'	Orange

03. CHARACTERISTICS

MECHANICAL	
Height	4 meters
Tiltable part	Fixed or tiltable
Protection	Galvanized steel
Paint	White
Mounting	In « U »
Wind vane	30 / 40 / 50 cm
Braces	3 x 120°
Anchorage Block	600 x 600 x 800 mm
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
FAA	Compliant
Quality	ISO 9001 ; 2015
Warranty	1 year





PORTABLE BEACON



01. DESCRIPTION

Our portable beacon range is a solution for temporary marking or emergency closing, based on multi-LEDs technology. The whole system is autonomous and includes charger (portable beacon only) and battery. Different monitoring options are available.

02. ADVANTAGES

- Long life time > 10 years
- Multi-LEDs
- Independent system
- Blinking of the light when the level of load of the battery is low
- 2 year warranty (excluding battery)
- Zamac box with epoxy powder painting
- No maintenance
- Available in bi-colors (ex: Red AND Blue, Red OR Blue) for runway closing and taxiway beacons
- Can be connected to 6.6A (without batteries)
- Available with remote control

03. MODELS

MODEL	REFERENCE	COLOR	BATTERY	AUTONOMY
Portable	BPLBIAR	Red	1 x 12V 7Ah	80h
	BPLBIAB	White	1 x 12V 7Ah	80h
	BPLBIABL	Blue	1 x 12V 7Ah	80h
	BPLBIAR&B	Red AND Blue	1 x 12V 7Ah	80h
	BPLBIAR/B	Red OR Blue	1 x 12V 7Ah	80h
	BPLBIAV	Green	1 x 12V 7Ah	80h
	BPLBIAR&V	Red AND Green	1 x 12V 7Ah	80h
	BPLBIAR/V	Red OR Green	1 x 12V 7Ah	80h
Mini	BPMLBIAR1	Red	1 x 12V 1,2Ah	20h
	BPMLBIAR2	Red	2 x 12V 1,2Ah	40h
	BPMLBIAW1	White	1 x 12V 1,2Ah	20h
	BPMLBIAW2	White	2 x 12V 1,2Ah	40h
	BPMLBIAR/B1	Red OR Blue	1 x 12V 1,2Ah	20h
	BPMLBIAR/B2	Red OR Blue	2 x 12V 1,2Ah	40h
	BPMLBIARV1	Red AND Green	1 x 12V 1,2Ah	20h
	BPMLBIARV2	Red AND Green	2 x 12V 1,2Ah	40h

MINI PORTABLE BEACON

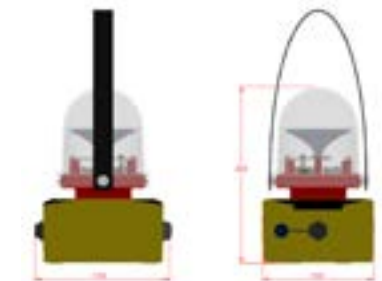


04. CHARACTERISTICS

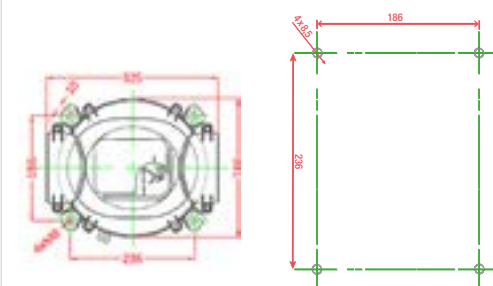
	PORTABLE BEACON	MINI PORTABLE BEACON
LUMINOUS		
Luminous source	Red / White / Blue / Green / Orange	
Horizontal / Vertical beam	360° / 10°	
Luminous intensity	> 10 Cd	
MTBF	100 000 hours	
ELECTRICAL		
Voltage	110 to 240V AC	
Functioning temperature	-10°C to +55°C	
Autonomy	80 hours	20 hours (1 battery) 40 hours (2 batteries)
Loading time	7 hours	1.5 hours per battery
Battery	AGM 12V 7Ah	AGM 12V 1,2Ah
Protection class	IP66	
MECHANICAL		
Body material	Zamac	Aluminum
Lamp material	Composite	
Lens material	Polycarbonate with bird spike	
Height	420mm	222mm
Weight	< 5 Kg	< 2,5 Kg
ENVIRONMENTAL		
Humidity	100%	
Frost	-60°C	
Wind speed	240 Km/h	
CERTIFICATIONS		
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE	
OACI	Annex 14, Volume I, Chapter 6	
Quality	ISO 9001 ; 2015	
WARRANTY		
Warranty period	2 years	

DIMENSIONS

MINI PORTABLE BEACON



PORTABLE BEACON



+ TRANSPORTATION TRAILER



AVAILABLE ACCESSORIES FOR INSTALLATION

- Specific trailer (40 or 60 beacons)
- Remote control
- Can be piloted via PCL
- Plug to recharge several beacons



01. DESCRIPTION

The LEDEO BDP range answers different needs of elevated beaconing:

- Taxiway edge and traffic lanes
- Runway closing
- Runway edge

The LED technology offers strong performances in terms of life time (100 000 hours). It is designed for an easy installation.



02. ADVANTAGES

- Long life time > 10 ans
- Multi-LED technology
- Multi-use: available in various colors
- Enables a day & night beaconing (reflecting base in option)
- The exclusive design of DELTA BOX isolating transformer allows continuity of the loop in case of failure of one or several lights
- Maintenance free: no replacement of the light bulb needed
- FAA connection, depending on your need:
 - 2 FAA input & output plugs with connectors type 1 & 7
 - 2 FAA input & output plugs with connectors type 6
- 2-year warranty

03. MODELS

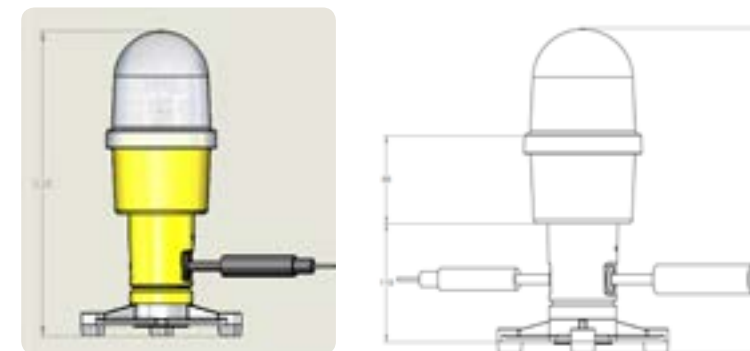
REFERENCE	COLOR	VOLTAGE	WIRING
BDP-W-230	White	110 to 240V AC	Secondary
BDP-B-230	Blue	110 to 240V AC	Secondary
BDP-G-230	Green	110 to 240V AC	Secondary
BDP-O-230	Amber	110 to 240V AC	Secondary
BDP-R-230	Red	110 to 240V AC	Secondary
BDP-W-6.6	White	6.6A	Secondary
BDP-B-6.6	Blue	6.6A	Secondary
BDP-G-6.6	Green	6.6A	Secondary
BDP-O-6.6	Amber	6.6A	Secondary
BDP-R-6.6	Red	6.6A	Secondary



04. CHARACTERISTICS

LUMINOUS					
Colors	Blue	White	Green	Amber	Red
Luminous source	LEDs				
Horizontal beam	360° or 180°				
Vertical beam	0-6°	6-75°	2-10°		
Luminous intensity (in candelas)	2	0.2	> 15	10 to 30	7.5 to 25
MTBF	100 000 hours				
ELECTRICAL					
Voltage	110 to 240V AC / 6.6A				
Operating temperature	-40°C to +55°C				
Protection class	IP66				
MECHANICAL					
Body material	Plastic				
Lens material	Polycarbonate				
Mounting	Tripod – 2"GAZ BSP (not included)				
Height	328mm				
Weight	6 Kg				
ENVIRONMENTAL					
Humidity	100%				
Frost	-40°C				
Wind speed	160 Km/h				
CERTIFICATIONS					
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE				
OACI	Annex 14, Volume I				
Quality	ISO 9001 ; 2015				
WARRANTY					
Warranty	2 years				

DIMENSIONS



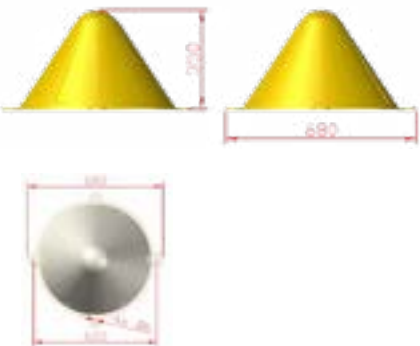
AVAILABLE ACCESSORIES FOR INSTALLATION

- Connection FAA style 6
- Connection FAA style 1 and 7 to connect in series
- Tripod 2"GAZ BSP





TRUNCATED CONE



01. DESCRIPTION

These composite beacons are dedicated to the signaling of runways and roads located within Airports and Airfields. They are studied to avoid any damage to the engine in case of shock. White truncated cones to delimit the runways and yellow for traffic lanes.

02. MODELS

REFERENCE	DESIGNATION	COLOUR
BPTRY	Truncated cone	Yellow
BPTRW	Truncated cone	White

ACCESSORIES AVAILABLES

- Fixation

DIHEDRAL CONE



01. DESCRIPTION

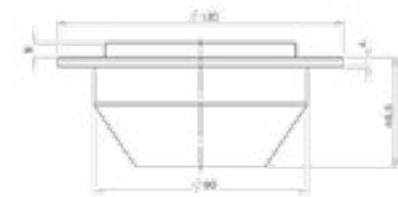
These composite beacons are dedicated to the signaling of runways and roads located within Airports and Airfields. They are studied to avoid any damage to the engine in case of shock. This dihedral beacon is red and white to mark the extremities of runways. This beacon is delivered with 2 frangible pickets treated with Carbonyl as well as with 4 holding nuts.

02. MODELS

REFERENCE	DESIGNATION	COLOUR
BPDIEDRE	Dihedral Cone	Red and white



DIMENSIONS



SHALLOW BASE



01. ADVANTAGES

- Long lifetime >10 years
- Optimized light output due to patented optics concept
- Compact and low propulsion
- Maximum resistance
- 2-year warranty

02. APPLICATIONS

REFERENCE	VOLTAGE	COLOR
TLOF - G - AB	24V	Green
TLOF - G - MB	230V	Green
FATO - W - AB	24V	White
FATO - W - MB	230V	White
TLOF BASE	-	-
FATO BASE	-	-

03. CHARACTERISTICS

	TLOF	FATO
LUMINOUS		
Luminous source	Green LEDs	White LEDs
MTBF	100 000 hours	
ELECTRICAL		
Voltage	Available in 24V or 230V	
Operating temperature	-40°C to +55°C	
Consumption	< 6W	< 10W
Protection class	IP68	
MECHANICAL		
Mounting	Full flush or semi-flush	
Height / Width	52,5mm / 120mm	
ENVIRONMENTAL		
Humidity	100%	
Frost	-60°C	
Wind speed	240 Km/h	
CERTIFICATIONS		
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE	
OACI	Annex 14, Volume I, Chapter 5	
Quality	ISO 9001 ; 2015	



HELIPORT EQUIPMENT

MORSE CODE HELIPAD LIGHT

LMIH



05. CHARACTERISTICS

LUMINOUS	
Luminous source	White flash LEDs
Horizontal beam spread	360°
Vertical beam spread	0° to 10°
Luminous Intensity	> 1 700 Cd at 0° > 2 500 Cd between 1,5° & 2,5° > 1 700 Cd between 3° & 4° > 750 Cd between 5° & 7° > 250 Cd between 8° et 10°
Flash frequency	Morse H Code
MTBF	100 000 hours
ELECTRICAL	
Voltage	240V AC / 50 Hertz
Operating temperature	-55°C to +55°C
Current I _{max}	In 230V: I < 500mA
Protection class	IP66
MECHANICAL	
Box material	Zamac
Body lamp material	Aluminium
Lens material	Polycarbonate
Mounting	M8 screw (in option)
Height / Width	410mm / 410mm
Weight	< 16 Kg
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
OACI	Annex 14, Volume I, Chapter 5
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years

01. DESCRIPTION

The **LEDEOMIH** is a heliport white light, monobloc, given LED technology. It offers significant advantages in terms of lifetime (100 000 hours), sturdiness and energy consumption. The ruling of the light can be achieved through a deported command system (UPS, control panel). The photocell for automatic night ignition and the dry contact are both in option. Our heliport beacon gives out series of 4 flashes, every 1.2 second (Morse H Code – in standard other code are possible). Its compact design facilitates its installation.

02. ADVANTAGES

- Lifetime > 10 years
- Multi-LEDs technology
- Low Consumption
- No Maintenance
- 2-year warranty
- Zamac box with epoxy paint
- Wiring on terminal block, cable gland output

03. APPLICATIONS

It is recommended to install a Morse Code Helipad Light on a Heliport: When visual guidance on a long distance is ruled necessary and when that visual guidance is not handled by other means. When it is difficult identifying the Helideck because of the surrounding lights.

The heliport light will be placed on the helipad or next to it, preferably on a lifted point in a way that the pilots are not dazzled at low distance.

04. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
LMIH00MB	110-240V	Not included	Not included
LMIH11MB	110-240V	Included	Included

HELIPORT EQUIPMENT

WHITE FLOODLIGHT



01. DESCRIPTION

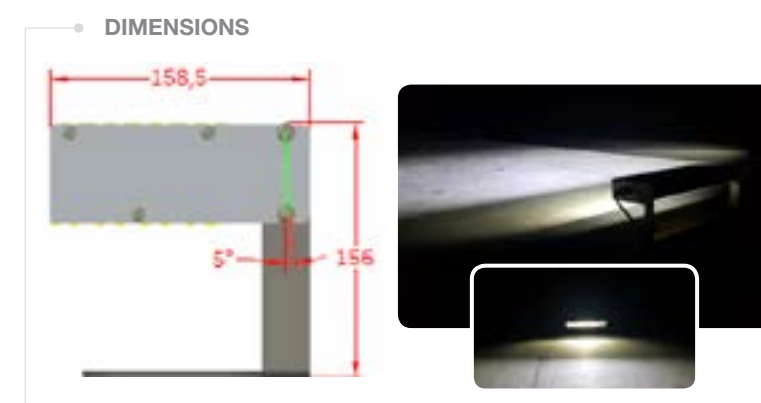
The **WHITE FLOODLIGHT** is a light of 10.000 cd intensity with multi-LEDs technology, developed with an aluminum design for a natural fresh cooling system. It has been designed for an easy installation.

02. ADVANTAGES

- Lifetime >10 years
- Multi – LEDs
- Reflector for beam optimization
- Shortened time of installation
- No maintenance
- 2-year warranty
- Integrated radiator for a natural cooling
- One single bloc, with electronics embedded
- Protection Class: IP66
- Frangible

03. MODELS

REFERENCE	VOLTAGE	PHOTOCELL	DRY CONTACT
P-TLOF-LED	110-240V	Not included	Not included



04. CHARACTERISTICS

LUMINOUS	
Luminous Source	LEDs
Colour	White
MTBF	100 000 hours
ELECTRICAL	
Tension	110-240V
Functioning Temperature	-55°C à +55°C
Consumption	< 17 Watts max
Protection Class	IP66
MECHANICAL	
Body lamp material	Aluminium
Lens Material	Glass
Fixation	M8 screw – On ground
Height	156 mm
Width	158.5 mm
Weight	< 3 Kg
ENVIRONMENTAL	
Humidity	100%
Frost	-60°C
Wind Speed	240 Km/h
CERTIFICATIONS	
CE	EN60947-1 CEI60364, NF C15-100 2014 / 35 / UE
Quality	ISO 9001 ; 2015
WARRANTY	
Warranty period	2 years
OPTIONS	
Solar Power Supply	☑



Pylon



Airport



Building



Stack



HV Line



Crane



Structure



Wind Turbine

HELIPAD EQUIPMENT

PCL

RUNWAY LIGHTING REMOTE CONTROL BY RADIOFREQUENCY



01. DESCRIPTION

Our **Pilot Control Lighting (PCL)** system allows a remote control of the ON/OFF of our beacons, dedicated to small airports and helidecks. The system is provided with a push button feature that the pilot will use on the radiofrequency of the helicopter or aircraft.

02. ADVANTAGES

- Quick and easy installation
- Integrated in a waterproof cabinet with electric protection
- Modular system
- Manual turn ON with dry contact available on terminal block
- Set up of the frequency through computer software
- Easy to use

03. APPLICATIONS

Our system allows to remote control the ignition of the runway lighting through radiofrequency and is ICAO / FAA L854 compliant.

04. OPERATION

Our runway lighting control system has 3 outputs protected by a type II circuit-breaker. In standard, 3 clicks on the pilot radio in less than 5 seconds initiates the beacon for a period of 15 minutes. The set of functionalities is programmable via a PC software supplied with the PCL kit.

05. MODELS

REFERENCE	POWER SUPPLY	PHOTOCELL	DRY CONTACT
HELI-PCL	110-240V	-	Option

ELECTRICAL

Power supply	110V-240V
Operating temperature	-40°C to +55°C
Consumption	< 15 Watts max

MECHANICAL

Body material	Painted steel
Height	328mm
Width	330mm
Weight	< 7 Kg

ACCESSORIES INCLUDED

Antenna + antenna cable	2 meters
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WARRANTY

Warranty period	2 years
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