obsta®

RELIABILITY
IN OBSTRUCTION
LIGHTING

EDITION 11

FAA OBSTRUCTION LIGHTS

TELECOM

BROADCASTING TOWERS

CHIMNEY

AIRPORT

WINDTURBINES

BUILDINGS

www.obsta.com

Edition 11 - 03/2026 - This document could be modified without notice

Company history

OBSTA, is part of an industrial group that engineers, manufactures and sells obstruction lights for transmission lines, telecom, broadcasting towers and all kind of obstacle to air navigation since more than 30 years. Our obstruction lights are manufactured by us compliant with ICAO annex 14 chapter 6 (International Civil Aviation Organization) recommendations and the FAA (Federal Aviation Administration).
OBSTA has manufacturing facilities in France and has sales offices located in France, Germany, USA, China, Thailand, Dubai and Bogota.

A long history

Before Obsta was part of the company Claude that was manufacturing all kind of lamps. This company was created by Georges Claude (September 24th 1870 – May 23th 1960) a French physicist and chemist :

1902 : Extraction of rare gas from the air (neon, argon, xenon..) and creation of the company Air liquide
1910 : Invention of the first modern patented discharge lamp tube and creation of Claude company manufacturing all kind of discharge and incandescence lights
1960 : Invention of the first balisors for transmission lines
2003 : New led NAVILITE obstruction lights red fixed
2008 : New obstacle light with linear optic for discharge and LED lights.
2012 : New medium and high intensity LED lights.
2015 : FAA Certification
2023 : New LED Conductor Marking Light named HVILTE
2024 : New Concept for Aircraft Warning light: IoT controller OBSTALINK

Specialist in obstruction lighting

Over the years, tree large product families (neon xenon and led type) have been developed in the respect of the most severe standards, requested by our customers. OBSTA lights are designed in the respect of the latest international standards that are ICAO and FAA. They constitute a complete range of low intensity or L-810, medium intensity or L-865/L-864 and also high intensity obstruction lights, ideal for broadcasting towers, telecom mast, transmission lines, stacks and wind turbines.

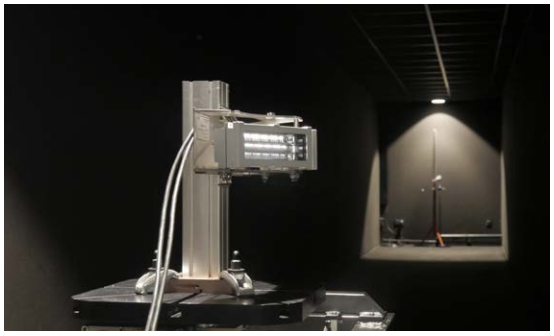
Led NAVILITE® red fixed obstruction lights (low intensity and L-810) since 2003 The NAVILITE series is dedicated to night only obstruction lights especially for telecom mast, buildings close to airports and all kind of obstacle below 45 meters high. Completely molded with 64 leds divided in 16 independent led circuits, they are ideal for all kind of obstacle

- Led OBSTAFLASH : OBSTAFLASH white and red flashing for high structures medium intensity type A and B/C, L-865/L-864, L-865, L-864 and L-810.
High intensity type A and B

Test facilities

In order to test its products internally for standards compliance and to evolve toward greater reliability OBSTA has several test sites (France, USA) equipped with :

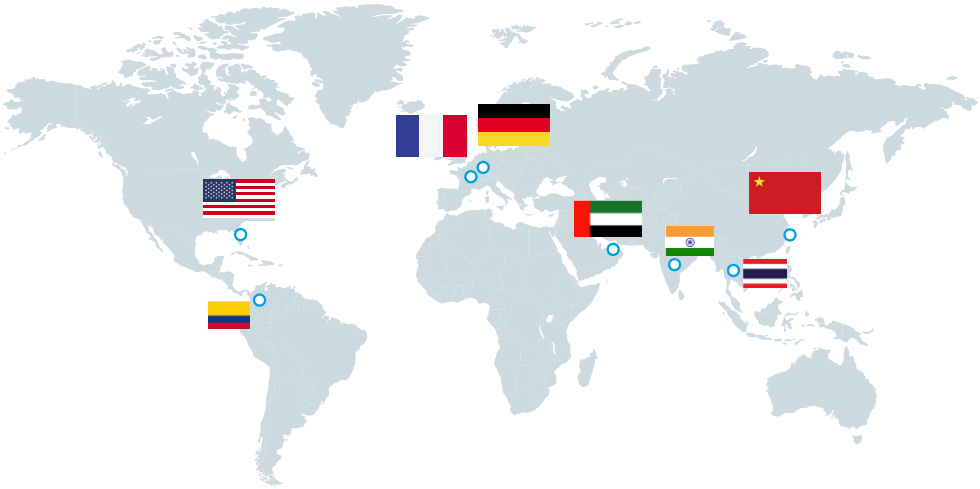
- Photometric band with visible and infrared capability
- 1.2/50-8/20µs hybrid wave generators up to 20 kV/10 kA
- HT digital Oscilloscope fast
- Material for test environment (damp heat, climate, shock)



An international company

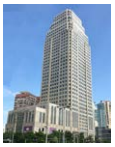
Paris -
Head Office - France and Export Sales Office

Reims -
Production plant and logistics platform













Any object which could represent a hazard for low-flying aircraft must be marked by beacon lights. The ICAO (International Civil Aviation Organization - appendix 14, Chapter 6) and the FAA (Federal Aviation Administration - USA) lay down internationally-applicable rules on the characteristics of the beacons and their installation.

Some points of the regulations (depending on the type of obstacles which must be marked), and the corresponding installation rules, are given below.

Intensity	Color	Type		flashes per minute	Night (Cd)	Day (Cd)	Twilight (Cd)
		ICAO	FAA				
LOW	**Red**	B	L-810	Steady or flashing with L-864	≥ 32.5	light OFF	
MEDIUM	**Red**	B	L-864	30 fpm	2,000 ± 25%	light OFF	
	Dual Color	A & B	L-865 / L-864	40 fpm (white) 30 fpm (red)	2,000 ± 25%	20,000 ± 25%*	20,000 ± 25%*
	White	A	L-865	40 fpm	2,000 ± 25%	20,000 ± 25%*	20,000 ± 25%*
HIGH	**White**	A	L-856	40 Fpm	2,000 ± 25%	270,000 ± 25%*	20,000 ± 25%*

* : FAA requires a flash duration of 100ms max with Blondel-Rey formula for effective intensity.
NVG compatible for L-810 and L-864 lights

In order to help you choosing the proper light you need, you will find common configurations.
The recommendations and rules mentioned below **are only given for information based on the FAA circular**

FAA Advisory Circular regarding Specification for Obstruction Lighting Equipment – 11/16/2020

2.4.1. Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light, flashing obstruction light regardless of its position, wind turbine lighting fixture, or wind turbine synchronization should be reported immediately by calling Outage Reporting and Notice to Airmen (NOTAM) at 877-487-6867, or in Alaska 800-478- 3576, so a NOTAM can be issued. For structures that are regulated by the FCC (Federal Communications Commision), the FCC advises that noncompliance with notification procedures could subject the Sponsor to penalties or monetary forfeitures. Voluntarily installed lights (not required by an FAA determination) do not require a NOTAM.
2.5 Notification of Restoration. As soon as normal operation is restored, notify Outage Reporting and NOTAM Offices (see Paragraph 2.4.1). Note: For structures regulated by the FCC, the FCC advises that noncompliance with notification procedures could subject the Sponsor to penalties or monetary forfeitures.

Obstruction light classification

FAA & ICAO type	OBSTA designation	OBSTA part number (FAA)	Compliance statement
L-810	NAVILITE-FAA	113969IR	FAA (150-5345-43J) ETL certified + compliant with ICAO low intensity type B
L-865/L-864	Obstaflash OFI-RW-240-U; OFI120-RW-48/240-U	113725UIA ;113758UA	FAA (150-5345-43J) L-865/L-864 ETL certified + compliant with ICAO medium intensity type A & B
L-864	OFC-RI-240; OFC-RI-048	113790RI-240 ; 113790RI-048	FAA (150-5345-43J) L-864 ETL certifiied + compliant with ICAO medium intensity type B
L-856	Obstaflash OFH-120-WW-240-U	113780U	FAA (150-5345-43J) L-856

Red Obstruction Light standards (FAA Style A)

Use cases for towers with red and white painted bands
Night only operation

1 **OBSTAFLASH RED COMPACT**
Medium Intensity Red only
L-864

2 **NAVILITE**
Low Intensity Red
L-810(F)

350-700 ft
(107-213 m)

1 TOP LEVEL

From 700 feets to 2200 feets
L-864 at every levels

1 MID LEVEL

150-350 ft
(46-107m)

1 TOP LEVEL

2 MID LEVEL

Up to 150 ft
(up to 46m)

TOP LEVEL 2

A2

A1

Controler + photocell

A0

Medium Intensity white obstruction light standards (FAA Style D)

Use cases for towers without painting bands
Day and Night operations (white color only)

1 **OBSTAFLASH**
Medium Intensity white
L-865

2 **OBSTAFLASH WHITE**
Medium intensity
L-865

350-700 ft
(107-213 m)

1 OR 2 **TOP LEVEL (3 METERS BELOW THE TOP)**

200-350 ft
(61-107m)

1 **TOP LEVEL**

1 OR 2 **MID LEVEL**

2 power supplies at the bottom
+ 1 photocell

D2

power supply + day/night
photocell at the bottom

D1

Medium Intensity obstruction light standards (FAA Style E)

Use cases for towers from 45m to above 105m
Day and Night operations (white day, red at night)

1 **113725UI**
Dual color medium intensity

2 **113969**
NAVILITE
Low Intensity Red
L-810(F)

3 **113758U**
OBSTAFLASH120 KIT
dual color medium intensity

350-700 ft
(107-213 m)

1 **TOP LEVEL**

OR

3 **3 meters below the top**

200-350 ft
(61-107m)

1 **OR** 3 **TOP LEVEL**

MID LEVEL

1 **OR** 3

2 **MID LEVEL**

E2

E1

Obstruction lighting for Stack

Stack whithout red & white stripes 45 to 105 meters high. Lights operating Day and night.

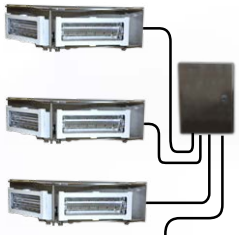




3 LED OBSTAFLASH120 dual color medium intensity
L-865 / L-864 20 feets max
2-6 meters below the top to avoid the smoke to hide the lights

RED AT NIGHT

WHITE AT DAY



3 L-810 (F) at mid level

FAA L-810 (F) type with NPT pipe

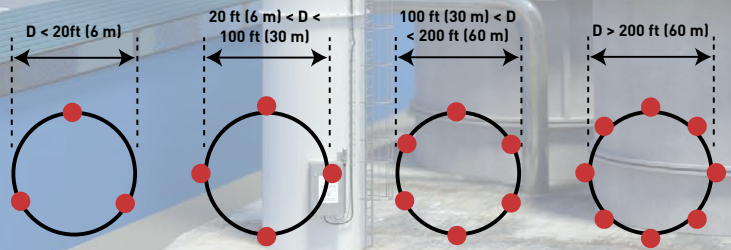
RED AT NIGHT

DAY OFF

Photocell north oriented

110 to 240 VAC

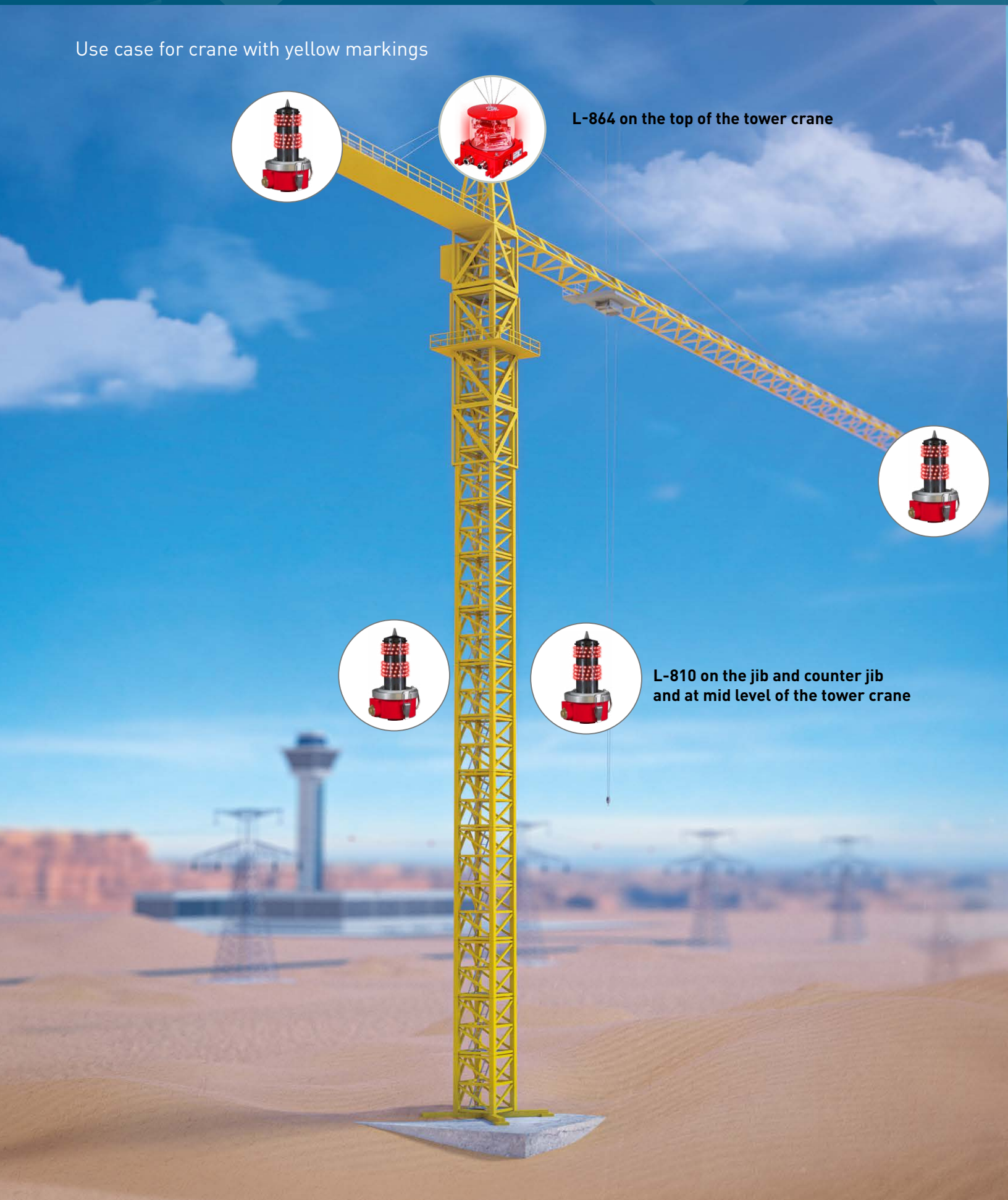
Number of lights per level depending on the diameter of the chimney



These configurations can be modified if stack are close to each other

Obstruction lighting for Crane

Use case for crane with yellow markings



L-864 on the top of the tower crane

L-810 on the jib and counter jib and at mid level of the tower crane

Wind Turbine Lighting

TOP LEVEL

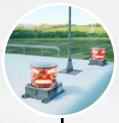
Red compact medium intensity L-864

MID LEVEL

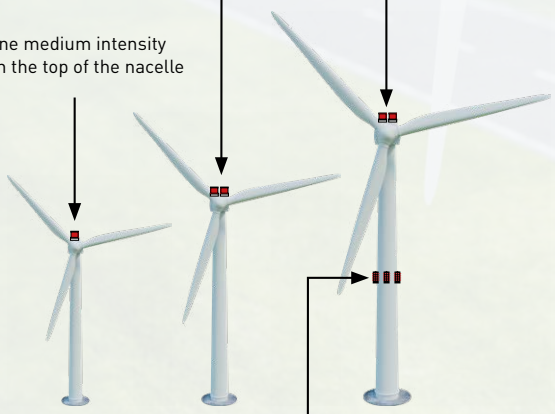
In option Navilite low intensity L-810(F)

NIGHT OPERATION

Two medium intensity light mounted on opposite rear sides of the nacelle



One medium intensity on the top of the nacelle



3 or more FAA L-810(F) spaced around the mast configured to flash in sync with red medium intensity

For FAA, 1 or 2 L-864 flashing red light at the top of the nacelle depending on the height of the windturbine :

- 1 single FAA type L-864 if ***windturbine ≤ 499ft (152m)***

- 2 FAA type L-864 if ***499ft (152m) ≤ windturbine ≤ 699ft (213m)***

- 3 or more FAA type L-810(F) spaced around mast at mid level for ***turbine > 699ft (213m).***

Obstruction lighting for Powerline

night operation (Pylon<45m)

OFC Medium Intensity
Red Only at top level
L-885

- FAA L-865
- Hard glass and aluminium. IP66 verified
- Easy installation with only captive parts
- Very low consumption
- GPS interface for synchronisation
- Dimensions: 20cmx20cmx20cm - Weight: 5 kg

SOLAR KIT
Autonomous power supply

- Size calculated from localization and options
- Long life solar gel batteries
- Initial capacity with at least 6 days of autonomy
- Protection of the battery against deep discharges
- Surge protection

OBSTALINK

- Monitoring of Lights (status and alarm)
- Preventive maintenance of solar kits (panel, batteries status)
- Wireless control

HVLITE - CONDUCTOR WARNING LIGHT LED & Induction

Type, Night Time every 70m nearby airport, 105m othewise

3

- Versions from 11 kV to 550 kV
- ICAO compliant Low Intensity Red steady-burning light
- Only 2 halves of anodized aluminium
- Most effective form factor against vibrations and wind
- 4 captive screws for assembly in few minutes
- Inductive power supply requiring 10 A

or

BALISOR - CONDUCTOR WARNING LIGHT

Neon & Capacitive Type

3

- Versions from 60 kV to 550 kV
- ICAO compliant Low Intensity Red steady-burning light
- Hard glass cold neon discharge tube
- OBSTA patented and manufactured from 1938
- No maintenance through decades
- Light intensity independant from current

4

or

5

PLASTIC WARNING SPHERE 600MM

Every 30M on OPGW or conductor up to 132kV*

- ICAO and CAA compliant
- Polyethylene, fast mounted per half
- EPDM clamps to not damaged the cable
- 8 drainage holes to prevent water accumulation
- Available in red, white and orange aviation
- * Up to 70°C on conductor

ALUMINIUM WARNING SPHERES 600MM

Every 30M on power cables up to 400 kV

- ICAO Compliant
- Fast mounting per half with latches
- Only 1 personne required for installation, only captive parts
- 8 drainage holes to prevent water accumulation
- Long durability in all climate conditions
- Available in white and red aviation

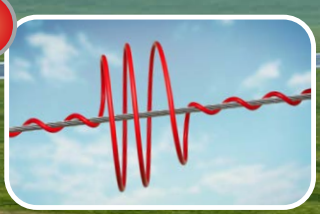
4

3

6

5

6



BIRD-FLIGHT Diverter

- Made with high impact PVC with UV protection
- Full unit or half available
- Low weight
- Quick and easy manual installation
- Positive grip on the conductor
- Available in dark gray, yellow or red.

NAVILITE FAA L-810 IR

FAA L-810 compliant with ICAO low intensity type B

L-810 and L-810 (F) as per FAA 150-5343J ETL certified

NAVILITE-IR-FAA-120-240V

One-piece molded

- Light perfectly waterproof
- no corrosion risk
- no losing parts
- bird spike
- 2 x ¾" NPT threaded holes (side + bottom)

LED light

- Total of 128 diodes
- 16 circuits of 4 LEDS with Infrared
- LED wiring 4 by 4 in active redundancy at 90°
- provide perfect support of the LED inclination angle
- excellent heat dissipation

Power supply

- Aluminium housing design
- Plug fitted to the side hole
- 110 VAC to 240 VAC power supply
- Surge protection included
- Alarm relay included
- Mimic with L-864 medium intensity (flashing mode) or fixed mode
- Beacon mounting options:

- using a rigid tube in accordance with FAA regulations (not supplied) with a 3/4 NPT hole to be defined,
- using mounting bracket 113928, to be ordered separately.

- Cable entry:

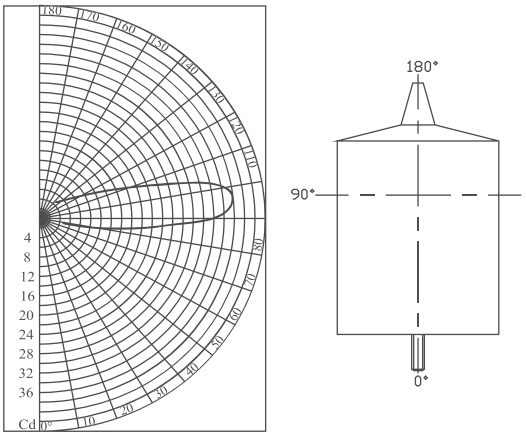
Through 3/4 NPT hole to be defined (cable gland only supplied with the mounting bracket 113928)

Night Vision Goggles according to FAA 150-5343J

MAIN REFERENCE

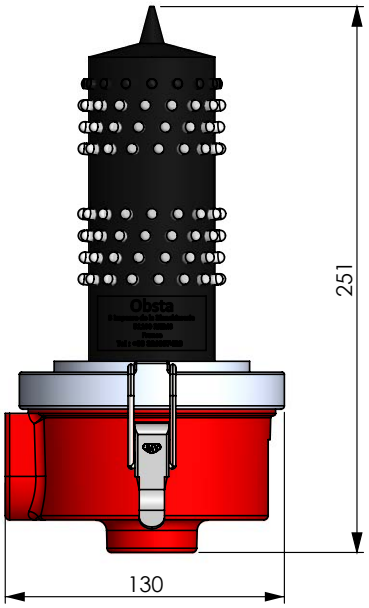
Designation	Part number	Power supply	Luminous intensity	Nominal power	Theorical lifetime
NAVILITE-IR-FAA-100-240V	**113969IR**	110 VAC to 240 VAC	As per FAA 150-5343J	2 W (fixed mode)	decade

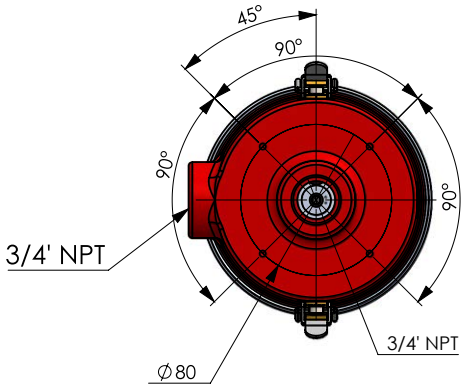
LIGHT INTENSITY DIAGRAM

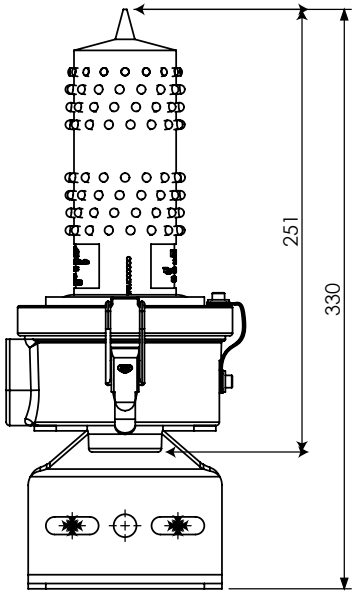


	NAVILITE L-810
IP degree	65 in vertical position
Operating temperature	-40° to + 55°C
Power supply	110 VAC to 240VAC 48Vdc +/- 10%
Weight (light + base)	1.4 kg (fixed through vertical or horizontal NPT)

DIMENSIONS (IN MM)





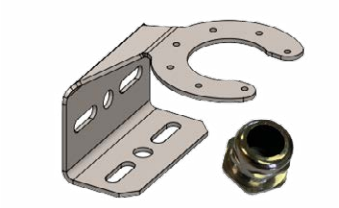


With bracket P/N 113928

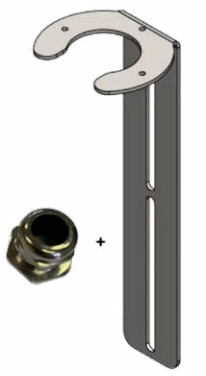
ACCESSORIES

- Support for horizontal or vertical attachment P/N 113928 or 113789-STI-FAA
- Support for dual system P/N 113929

- Support for horizontal or vertical attachment



Bracket for 1 lamp P/N 113928
(including cable gland)



Bracket P/N 113789-STI-FAA
(including cable gland)

Bracket for 2 lamp (DUAL)
P/N 113929

OBSTAFLASH COMPACT OFC

L-864 FAA (AC 150/5345-43J) certified with IR compatible with night vision goggles (NVG)
ICAO Red Medium intensity type B & C / CAA compliant (fixed mode)

Intertek

Characteristics

- Hard glass cover (no plastic) and aluminum based
- Easy installation with only captive parts
- 2 LED circuits with red and infrared leds
- Adjustable configuration through dip-switch inside the flash-head as per ICAO MI type B (20 to 60 flashead per minutes) or ICAO MI type C & CAA (fixed mode) or FAA L-864 (30 flashes per minutes)
- Alarm in case of light or power failure (normally open and normally close relay both available)
- Low consumption
- Surge protection included
- "Night Vision compatible"
- Photocell built-it in option
- Anti-condensation valve
- Modular construction
- GPS antenna (if wireless synchronisation is required)

Night Vision Goggles compatible according to FAA

Product range OBSTAFLASH COMPACT OFC
ICAO Red Medium intensity type B & C / L-864 / CAA / STAC

OFC - XX - XXX - R

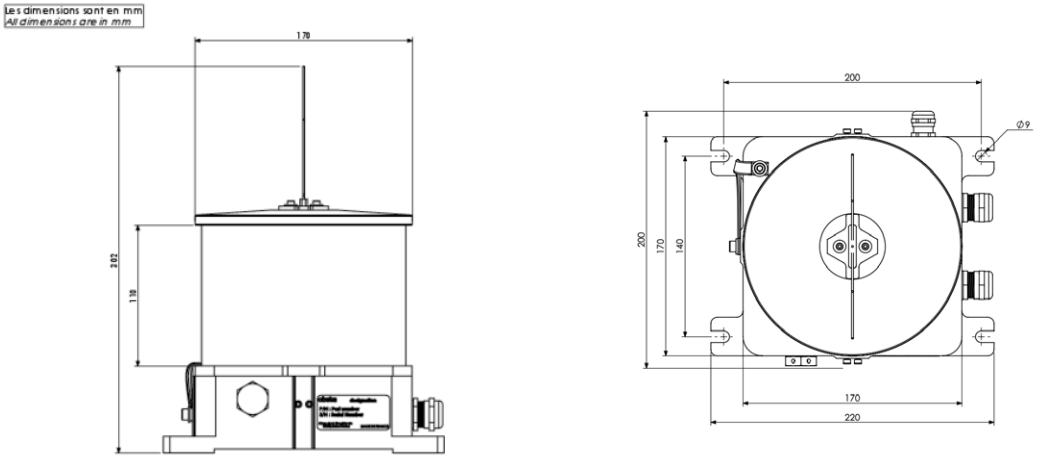
OPTION
- : no option
R : with built-in photocell

input voltage
048 : 48Vdc
240 : 110-240Vac
SOL : 10-24Vdc for 12vdc solar kit*

* ETL not listed

color
RI : red and infrared

WEIGHT & DIMENSIONS (IN MM)

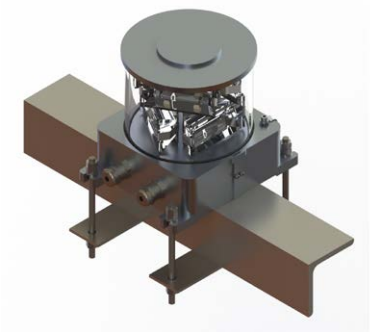


MAIN CHARACTERISTICS

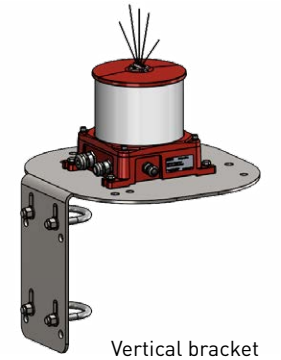
Mechanical characteristics	OFC
IP degree	66
Operating temperature	-40°C to +55°C
Cable entries	2 nickel-plated brass
Weight	5kg

MAIN REFERENCE FOR OFC-RI-XXX / FAA L-864

designation	part number	Voltage	Color	IR intensity and wavelength	Luminous intensity	Flashes per minute	Average power consumption
OFC-RI-048	**113790RI-048**	**48Vdc**	red	600mW/sr @ 800-900nm	2000cd RMS	As per FAA	**< 10 W**
OFC-RI-240	**113790RI-240**	**100-240Vac**	red				**< 10 W**



Horizontal bracket
P/N 113789-OFCB



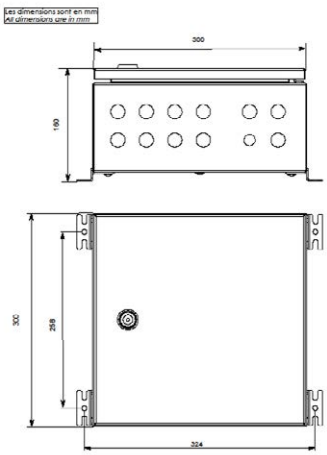
Vertical bracket
P/N 113789-OFC
tube mounting possible (70 to 139 mm)

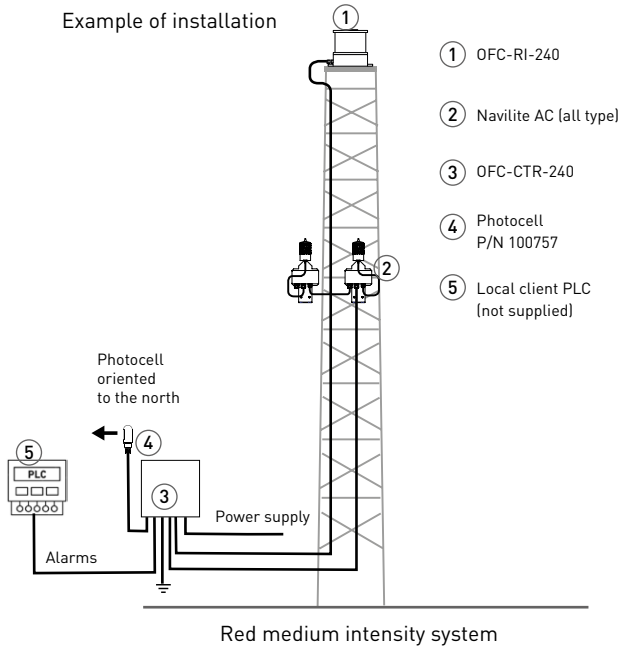
ANALOG CONTROLLER & CONNECTION BOXES

Stainless control box to facilitate the implementation and monitoring of red medium and low intensity OBSTA lights.
These metal boxes are suitable for EMC environments and severe climatic conditions.

CONTROL BOX OFC-CTR

- 8 terminal connections for max 8 medium intensity lights and/or low intensity lights red fixed or mimic with medium intensity red flashing
- relay for each lamp alarm contact
- alarm for the photocell in case of failure on a 24 hours cycle
- alarm in case of power supply loss on main input
- 1 visual indicator per light (or group of light)
- synchronization of medium intensity beacons (via GPS option)
- connection of optional photocell for day/night toggle
- synchronization of day/night toggle (via GPS astronomical clock)
- surge protection
- internal on/off switch and remote/manual to bypass the photocell or GPS
- cable inputs by gland nickel plated brass





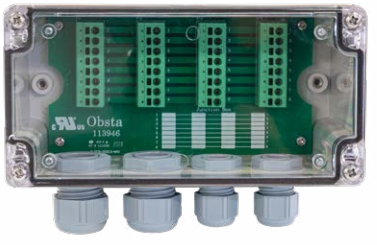
Red medium intensity system

SUITABLE FOR:

Part number	Voltage	OBSTA lights
113176-240-G	110-240 VAC	OFC and OFD 240 V (medium intensity type A & B, flashing mode) and NAVILITE
113176-048-G	48 VDC	OFC and OFD 48 VDC (medium intensity type A & B, flashing mode) and NAVILITE

⚠ The supply voltages for the controller and the beacons must be the same.

JUNCTION BOX FOR NAV-JB (P/N 113946)



Main characteristics

- Polycarbonate box for wiring in parallel 4 cables of 8 wires max
- Can be fixed on the bracket of NAVILITE, 113920
- Suitable for all voltage
- 2 cable entries diameter 5-10mm and 2 for cable diameter 7-13mm
- Terminals connections for the wires 2,5mm² max
- IP65 protection in vertical position

JUNCTION BOX FOR NAV-JB (P/N 113948)

Main characteristics

- Aluminium painted box for wiring in parallel 5 cables of 8 wires max
- Equipped with bracket, U-bolt in option
- Suitable for all voltage
- 5 cable entries for shielded cable diameter 10-16mm
- Terminals connections for the wires 2.5mm² max
- IP66 protection in vertical position
- Additional Type with relays inside driven by night signal :

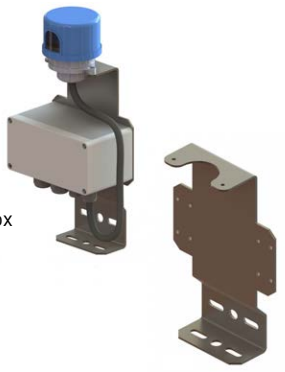
-version 113948-N with relay to switch on up to 4 red lights at night only, and de-activate light-alarm during day time

-version 113948-W with relay to switch on red lights at night only, and 1 white flashing light during the day only and de-activate light-alarm when the lights are off during day and night time accordingly

PHOTOCELL FOR NIGHT ONLY OPERATION

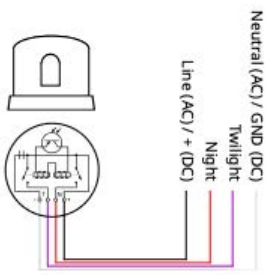
Photocell
P/N 100757

PHOTOCELL	Power supply	Max amps
100756	110 to 240 VAC	2 A (night circuit)
100757	12, 24 or 48 VDC	



Junction box
p/n 113946

Bracket 113927



- North-facing installation
- Twilight detection 500 Lux
- Night dectection 50 Lux
- Can be fixed on the bracket of NAVILITE, 113927
- Attached cable 50cm

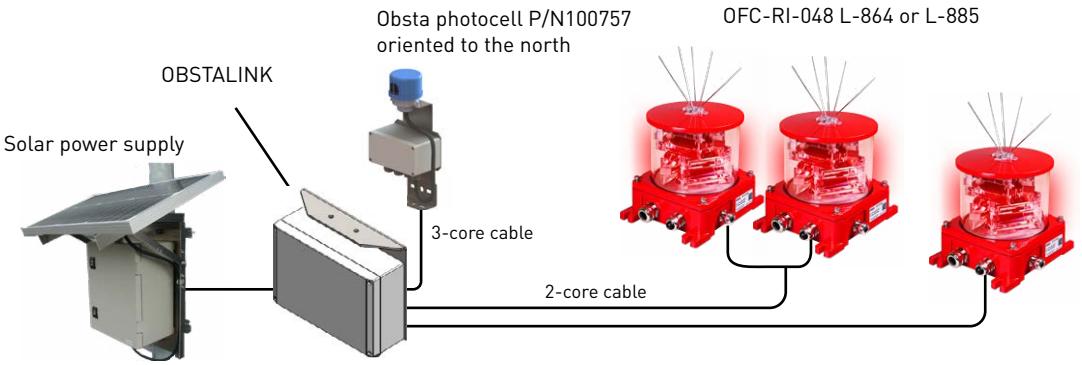
OBSTALINK

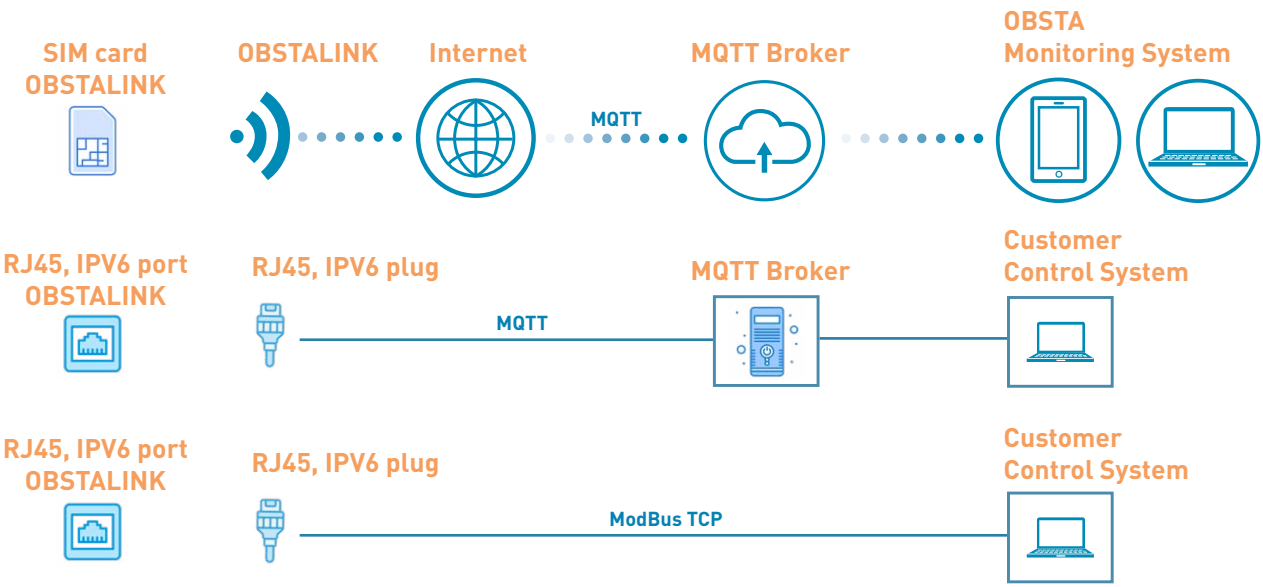
Measurement and monitoring system for three beacons or groups of beacons with local or remote data transmission (internet/MQTT protocol).

- Control of the power consumption of each light or group of lights (3 maxi.)
- Control of the external dry alarm contact (normally close or normally open) of each light (if available on the obstruction lights) or other external contacts (12 maxi.)
- Control of the DC power source (batteries from the solar kit or the battery cabinet)
- Periodic control of the system, every 30 minutes with automatic message (Notan)
- Last sent message in case of power failure (dead-man switch)
- Status of obstruction lights
- Alarm threshold settings on the server
- Stainless cabinet with cable inputs by gland nickel plated brass, IP66
- Connexion of an external photocell (for red only obstruction lights)
- Compatible with other brands of obstruction lights
- 4G LTE modem with 2G and 3G for internet connection (MQTT protocol)
- RJ45, IPV6 port supporting ModBus TCP & MQTT
- Aircraft Detection Lighting System (ADLS) ready for wind farm
- EN 18031-1 certified

Part number	Voltage	Number of lights to monitor
114800	10 to 60 Vdc	Up to 10 lights (steady or flashing)

EXAMPLE OF INSTALLATION





Obsta Monitoring website

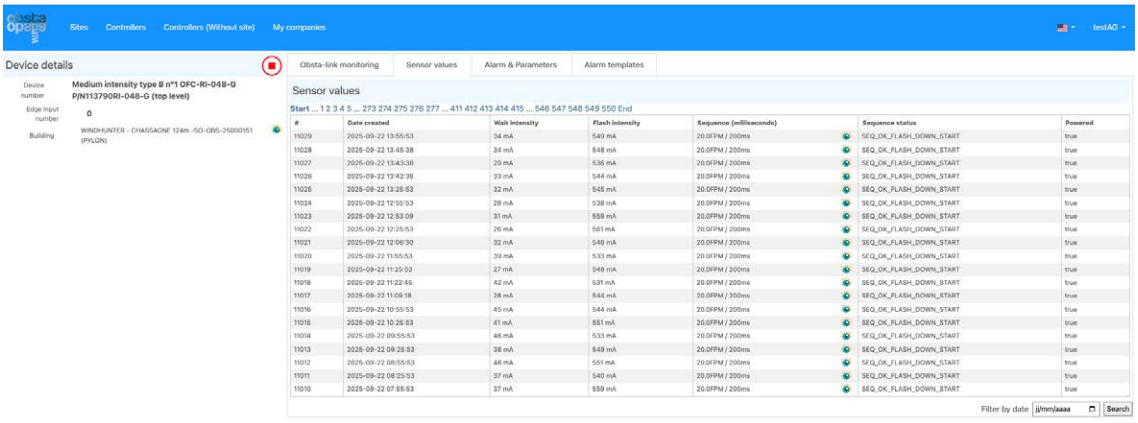
Monitoring web interface for Obsta customers and administrators

Features:

- Organize your sites, obstacles and lights centrally
- Overview of the status of lamps
- Display detailed information of the lamp and its power supply (monitoring view with graphs)
- OBSTALINK can define the threshold of the alarm and the notications to send in case of events.
- Storage of received telemetry data history
- Secured access

Display example : Monitoring of power supply

Display example : Monitoring of flashes



KIT OBSTAFLASH OFI360 110-240 Vac

L-865/L-864 FAA (AC 150/5345-43J) Certified
ICAO white & red Medium intensity type A+B compliant (fixed mode)

Flashhead with integrated 48VDC power supply
Patent : EP 1966535B1 & US 7816843

+

DC power supply box powered by 120-230VAC
OFI-CAB-1E-RW-240-U part number 113797UA

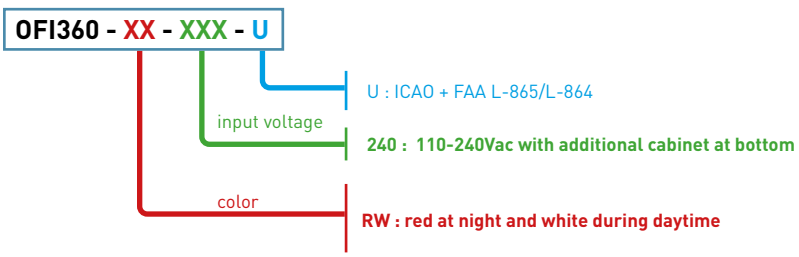
Flashhead

- 6 led replaceable projectors
- Aluminium and glass envelope
- Modular design
- Easy maintenance
- Precise optic , low led current for optimal lifetime
- Integrated 48 VDC power supply inside the flashhead
- Luminous indicator for each led circuits
- Captive parts
- 48 Vdc surge protection included
- Test button and luminous indicators
- GPS as back back up or as master
- Communication capabilities (MODBUS TCP), IPV6 port

Night Vision Goggles compatible according to FAA

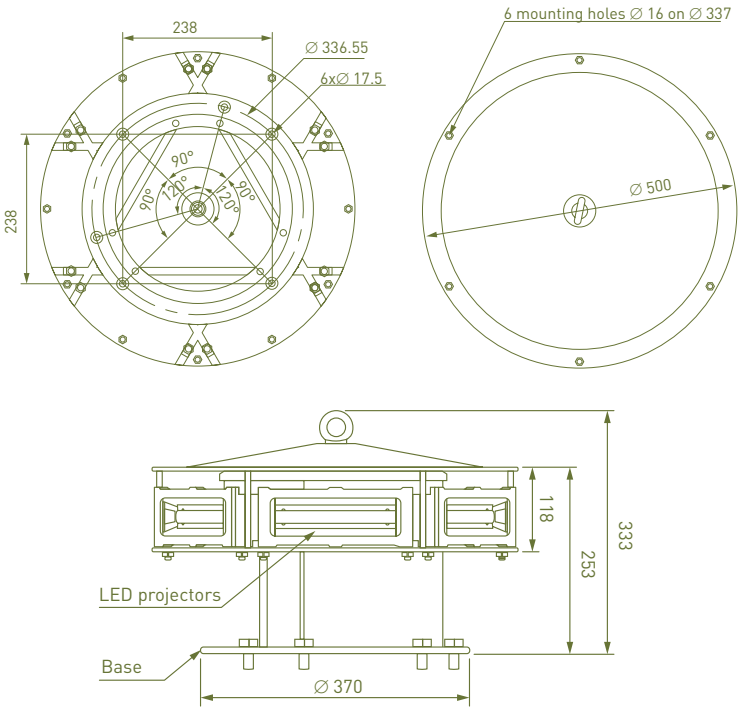
120-230 VAC Power cabinet

- Available in 120 /230 Vac
- Surge protection
- Automatic day/night switch with photocell
- Test button for day and night
- Modular design
- Two side lights in option, low intensity type
- Alarm contact
- Master/slave configuration for multiple lights synchronization
- The photoelectric cell code 100757-KIT, the cable between the box and the beacon, and, if necessary, low-intensity night-time intermediate lamps connected to the box at the bottom, must be ordered separately.



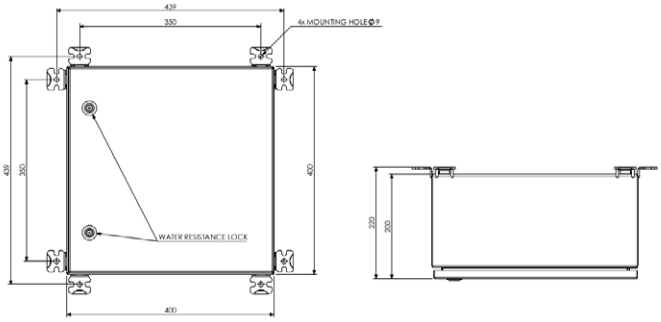
WEIGHT &DIMENSIONS (IN MM)

Flashhead



Weight: 14 kg - IP degreeIP66

Control cabinet



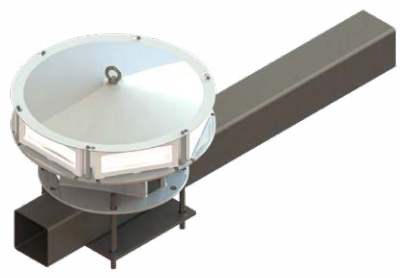
SETS COMPOSTION

IP degree for power cabinet	65 in vertical position
Operating temperature	-30° to +55°C
Input voltage	110 VAC to 240 VAC +/-10% 50 to 60 Hz
Cable entry for flashhead, power supply, photocell and alarm	4 nickel plated brass

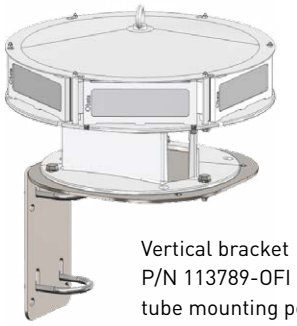
MAIN CHARACTERISTICS

Designation	part number	input voltage	ICAO category	FAA category	Flashes per minute
OFI360-RW-240-U	113725UIA	110-240Vdc	Medium intensity type A & B	L-865/L-864	40 in white 30 in red

Main characteristics	Effective Luminous output on site at 0°		Color		Beam Spread		Kit content
	Day	Night	Day	Night	Vertical	Horizontal	
Dual color (L-865/L-864)	20 000 Cd	2000 Cd	White	Red	> 3°	360°	OFI360-RW-048 p/n 113792UA + Power supply box OFI-CAB-240U p/n 113797UA



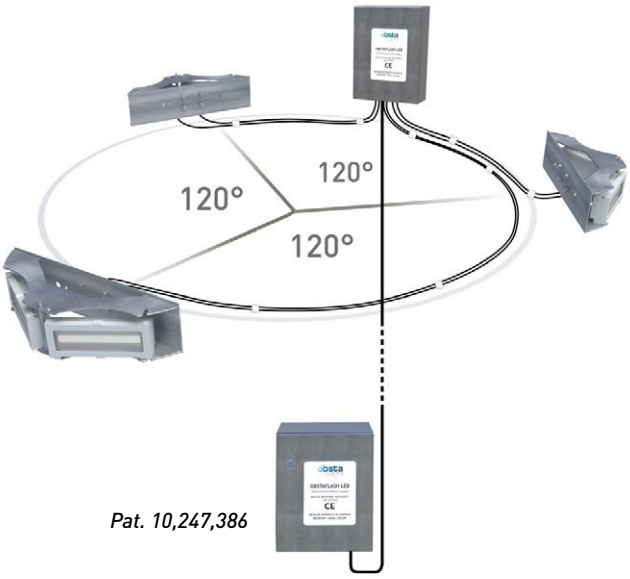
Horizontal bracket
P/N 113789-OFIB



Vertical bracket
P/N 113789-OFI
tube mounting possible (70 to 139 mm)

KIT OBSTAFLASH OFI120

L-865/864 FAA (AC 150/5345-43J) Certified, unchangeable.
ICAO white & red Medium intensity type A+B & compliant (fixed mode)



Pat. 10,247,386

Night Vision Goggles compatible according to FAA

Kit including 3 Obstaflash120

- 2 led projectors with 10 meters cable
- Aluminium and glass enveloppe
- Connection with connectors for dual color and gland for red only
- Precise optic for optimal power consumption,
- Electronic deported in external cabinet

+

Power cabinet

- Stainless enclosure
- Surge protection
- Test button for day and night, 1 luminous indicator per white led projector,
- Modular design,
- Alarm contact
- Master/slave configuration for multiple cabinet
- Connection terminal for L-810 or low intensity at intermediale level working at night only
- GPS as back back up or as master
- Communication capabilities (MODBUS TCP), IPV6 port
- Photoelectric cell code 100757-KIT, cable between the two boxes, and, if necessary, NAVILITE intermediate lamps must be ordered separately.

OFI120 - XX - XXX - U

- **U : ICAO + FAA L-865/L-864**
- input voltage
  - **48/240 : 110-240Vac with second cabinet at bottom of obstacle**
- color
  - **RW : red at night and white during daytime**

Product range OBSTAFLASH OF120

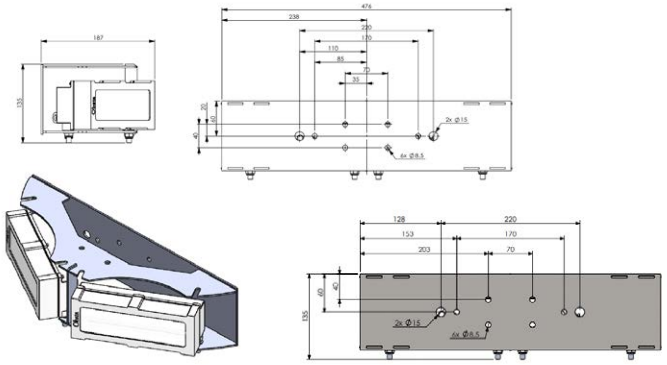
Kit including 3 Obstaflash120 medium intensity flashheads + power supply at same level, ICAO White and Red Medium intensity type A and B





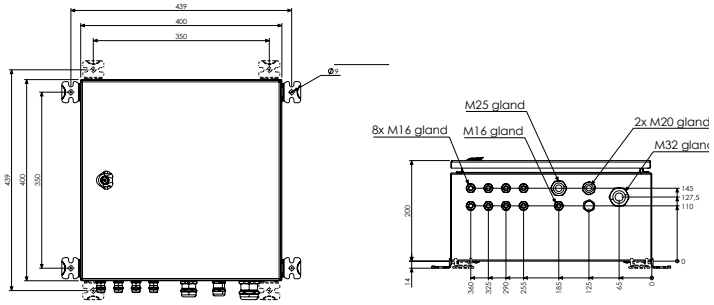
COMPOSITION PER ITEMS

Flash-head OFP-120



IP degree for power cabinet	65 in vertical position
Operating temperature	-30° to +55°C
Input voltage	110 VAC to 240 VAC 50 to 60 Hz or 48VDC +/-10%
Cable entry for power supply, photocell and alarm	nickel plated brass

Power supply

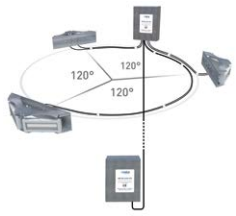


ACCESSORIES

- 48vdc photocell part number 100757
- NAVILITE-FAA-IR-110-240 intermediate lamps, code 113969IR, connected to the lower box
- Cable

MAIN CHARACTERISTICS

Main characteristics	Effective Luminous output on site at 0°		Color		Beam Spread		Flashes per minute
	Day	Night	Day	Night	Vertical	Horizontal	
Dual color (L-865/L-864)	20 000 Cd	2000 Cd	White	Red	> 3°	360°	40 in white 30 in red

	Designation	part number	Power supply	ICAO category	FAA category	Kit content
	OFI120-RW-240-U	113758UA	110-230 VAC	Medium intensity type A and B	L-865/L-864, dual color medium intensity	3 x OFP-120-RW-10-U (p/n 113747-U-10) + 1 x OFP-CAB-1B-RW-048-8M16-S (p/n 114103) In the bottom 1 x power supply box OFI-CAB-1E-RW-240-U (p/n 113797UA)

For more than 4 flasheads, "design your kit", see page 50-51

LED OBSTAFLASH HI L-856

The OFH270K high intensity is a white color flashing obstruction light L-856.

Patent : EP 1966535B1 & US 7816843

Flashhead

- 12 led projectors
- Aluminium and glass envelope
- Modular design
- Precise optic, low power consumption

Description

- 270 000 candelas during day time in white
- 20 000 candelas during twilight in white,
- 2000 candelas during the night white
- Rugged design
- Easy installation

Power cabinet per flashead

- Weathertight stainless steel enclosures (in vertical position),
- Surge protection
- Alarm monitoring
- Automatic day/twilight/night switch by photocell
- Luminous indicator for each projector
- Test button for day, twilight and night mode
- Modular design
- Low power consumption

Product range OBSTAFLASH OFH ICAO High Intensity type A / FAA

OFH-120 - XX - XXX-U

input voltage
240 : 110-240Vac

color
WW : white day tiwilight and night
RW : red at night and white during daytime & twilight

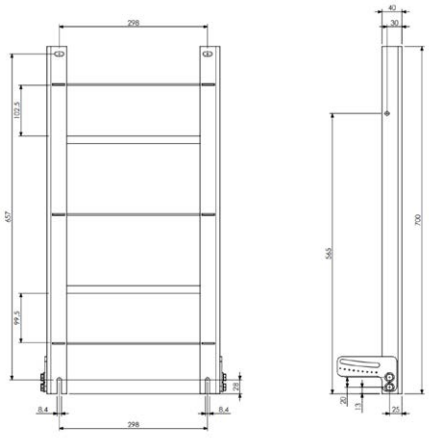
COMPOSITION

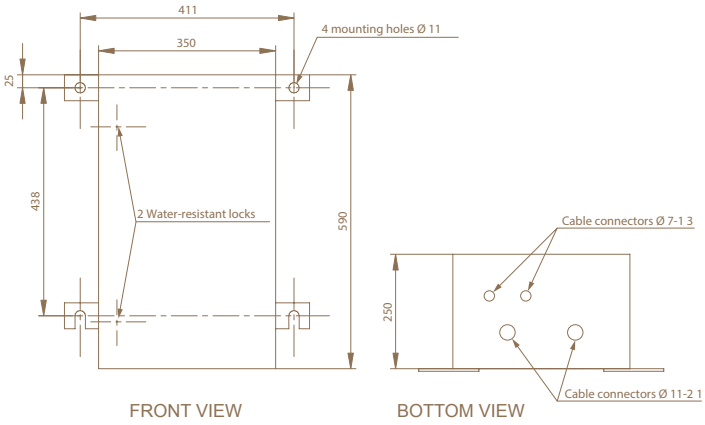
Obstruction lighting system 230 V - 50Hz	Part Number
Flashead + power cabinet	113780U
Photocell day/twilight/night	100757
Smart controller	114803

OTHER CHARACTERISTICS

- IP degree: 66 for the projectors and 65 for the stainless cabinet in vertical position,
- Weight per cabinet: 15kg,
- Weight per flashhead: 18kg (1kg per projector and 10kg for the stainless bracket),
- Temperature -30°C to +55°C,
- day/twilighy/night automatic switch by external photocell
- Autonomous synchronisation (master/slave configuration) or with external controller
- GSM modem with optical network for remote diagnostic.

FLASH-HEAD AND POWER CABINET





Main supply	Frequency	Max. wattage during day time
110V up to 240 V	50/60 Hz	300 W

MAIN REFERENCE

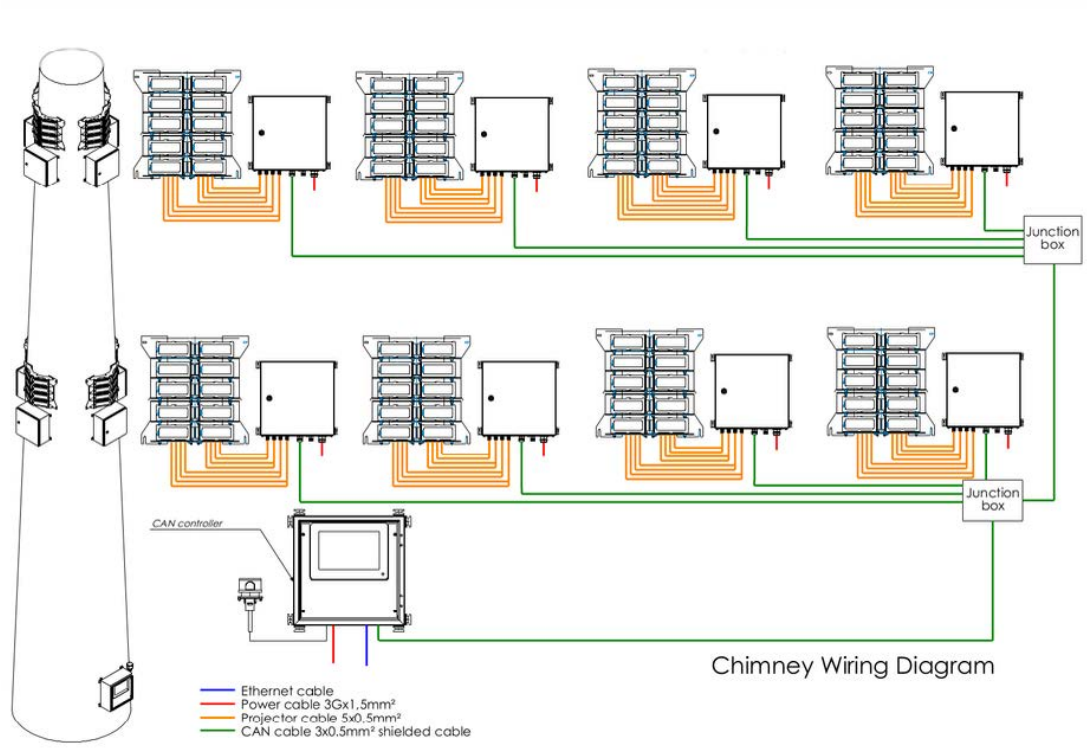
Designation	part number	Luminous Intensity			Beam spread		Flashes/minute
		Day	Twilight	Night	Vertical	Horizontal	
OFH-120-WW-240	113780U	270 000 Cd	20 000 Cd	2000 Cd	> 3°	120°	40

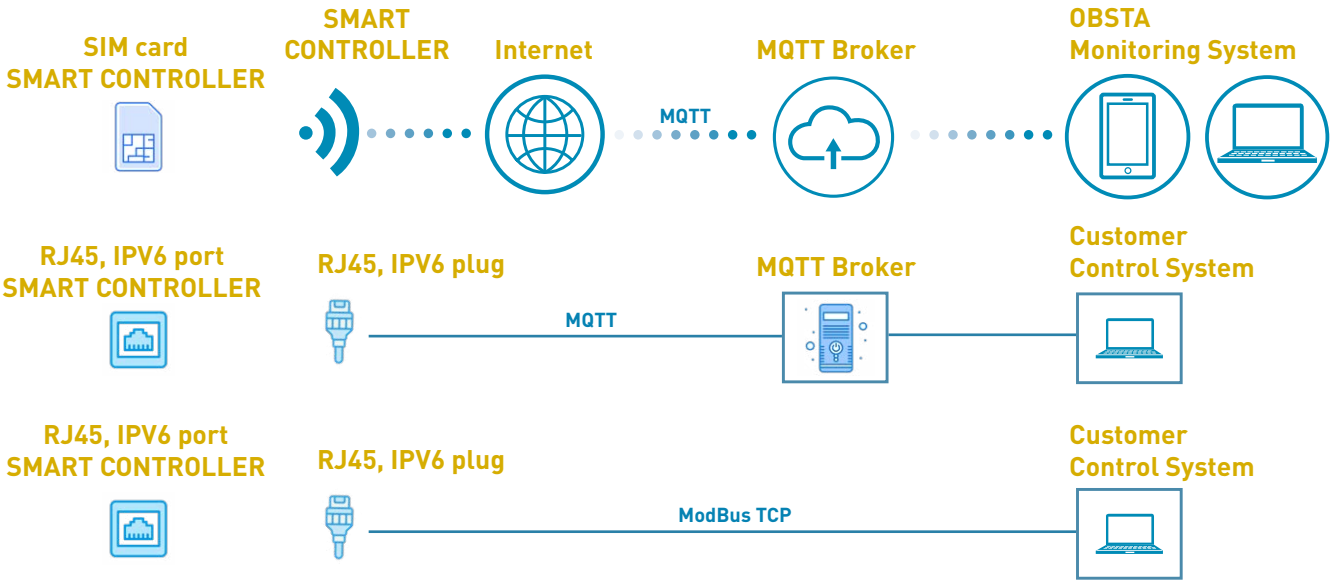
SMART CONTROLLER

- allows the maintenance, the configuration, the installation and the administration up to 64 medium OFI/OFP or high intensity OFH series obstruction lights locally and OBSTA cloud
- large touch screen
- status and telemetric, humidity and temperature of each flashing lights allowing precise diagnostic from the ground
- alarm threshold settings
- stainless cabinet with cable inputs by gland nickel plated brass
- surge protection
- connexion of an external photocell
- remote/manual switch to bypass the photocell and force day/twilight/night mode
- automatic through the MQTT
- 2-core shielded cable only dhared to all lights

Part number	Voltage	Max number of lights monitored
114803	110 to 240 VAC	64

TYPICAL WIRING DIAGRAM
HIGH INTENSITY + SMART CONTROLLER





Obsta Monitoring website and/or Display smart controller

Monitoring web interface for Obsta customers and administrators

Features:

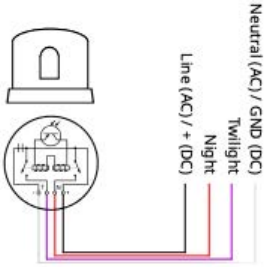
1/ Status of the lights and their power supply
- Status of the led projectors and their associeted power supply
- Status of the synchronisation coming from the GPS or other interface
- Status of the day/night mode
- Temperature inside the power supply
- Configuration of the flashheads

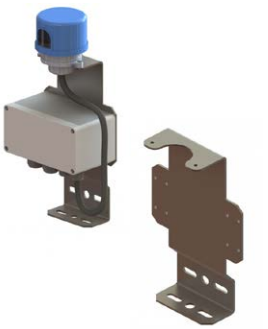
2/ Telemetric curves of each light
- Voltage of each led circuits
- Voltage of the power supply or batteries
- Temperature
- Humidity

PHOTOCELL DAY/TWILIGHT/NIGHT OPERATION
connected on the controller or on the power supply of the Flash-Heads

PHOTOCELL
100757

- North-facing installation
- Twilight detection 500 Lux
- Night dectection 50 Lux
- Can be fixed on the bracket of NAVILITE, 113927
- Attached cable 50cm





Bracket 113927

WARNING SPHERES

Those spherical markers are compliant with International Civil Aviation Organization (ICAO) recommendations annex 14 chapter 6 :

Paragraph 6.2.8: A marker displayed on a overhead wire, cable etc. should be spherical and not have a diameter of not less than 600mm

Paragraph 6.2.10: A marker should be of one color. When installed, white and red, or white and orange markers should be displayed alternately. The color selected should contrast with the background against it will be seen.

Warning spheres

- quick installation: easy and quick assembly with 6 nuts (no losing bolts)
- diameter: 610 mm
- material: polyethylene
- weight:4 kg
- colors : orange aviation or white
- clamps: adapted to the diameter of the cable
- optional armor rods for cable and OPGW (consult us)

MAIN CHARACTERISTICS

OBSTA part number	Color *	Clamp diameter *	Armor rod *
113655	Red aviation, orange aviation, white	From 9.3 mm to 42.5 mm	Optional

* to be defined when ordering

ALUMINIUM WARNING SPHERES

The spherical markers are compliant with International Civil Aviation Organization (ICAO) recommendations annex 14 chapter 6 :

Paragraph 6.2.5.4: A marker displayed on an overhead wire, cable, etc., should be spherical and have a diameter of not less than 60 cm.

Paragraph 6.2.5.5: The spacing between two consecutive markers or between a marker and a supporting tower should be appropriate to the diameter of the marker, but in no case should the spacing exceed 30 meters where the marker diameter is 60 cm. Where multiple wires, cables, etc., are involved, a marker should be located not lower than the level of the highest wire at the point marked.

Warning spheres

- Designed for high voltage cable up to 420KV
- No losing parts during installation with only 2 screws and 4 draw latches
- overall diameter 600mm
- material: aluminum
- weight: 6.5kg
- color: white, red or aviation orange
- clamps depending on the diameter of the cable

MAIN CHARACTERISTICS

OBSTA part number	Color *	Diameter of clamps *
113655AL	Red, orange or white	from 9 mm up to 67 mm

* to be specified at time order

SOLAR POWER SYSTEM

Solar kits are required in various situations: construction site lighting, permanent or temporary lighting supply.
They are determined based on the number of lights and the geographical location..
These solar kits are designed for long life (size of the batteries includes more than 5 days fo autonomy) and easy access for the maintenance for the batteries.

114500 series

- one or more photovoltaic panel(s)
- a charge controller
- long lifetime gel battery
- an aluminium frame with angle or vertical mounting bracket and battery box
- nominal battery capacity : 5 to 10 days depending on latitude
- easy access for maintenance of the battery
- in option OBSTALINK for remote control of the obstruction light system and the solar kit

1003SOL series

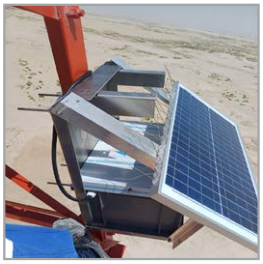
1004SOL series

1005SOL series

MAIN CHARACTERISTICS

Range	Batteries capacity range	Panel power range	Output voltage	Typical application*
114500	6 Ah	10 Wp	12Vdc	Temporary applications with low intensity beacons Mounting and dismounting windturbine. Equiped with low intensity light Type E (flashing).
114501	18 Ah	20 Wp	12 Vdc	Low intensity, Type B (continuous) or flashing depending on latitude
1003SOL	27 to 32 Ah	20 to 50 Wp	12 Vdc	Low intensity or medium intensity red at Night Type B flashing between 30°North and 30°South latitude (approx.)
1004SOL	41 to 100 Ah	30 to 100 Wp	12 Vdc	Low intensity or medium intensity red at Night Type B flashing between 45°North and 45°South latitude (approx.)
1005SOL	41 to 130 Ah	220 to 830 W	48 Vdc	For 1 Medium intensity Dual Color between 300 and 60° North

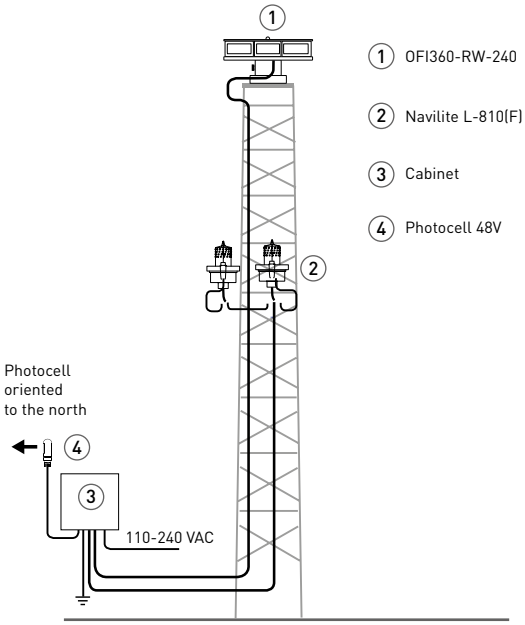
**Typical applications are given for general example from our experience. That is why we give ranges of adequate solar panels and batteries.*
For new projects, please ask us advice as we calculate best panels and battery capacities according to the most precise location (latitude, longitude, seasons, sun irradiance, etc.)



Photocell for night only operation or dual color light

Part number	Power supply	Switching threshold of the cell
100756	110 to 240 VAC 50/60 Hz	2 output signals: - red only operation at night - white/red change for day & night operation
100757	10 Vdc to 60 Vdc	

- plug-in modular construction with plated contact surfaces
- automatic control of the obstruction lighting according to ambient light
- timer to prevent the functioning of the cell at inopportunes times (eg lightning)

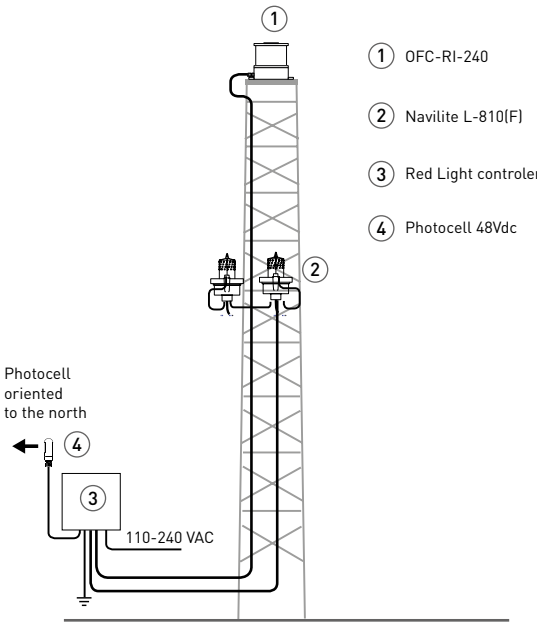


1 OFI360-RW-240
2 Navilite L-810(F)
3 Cabinet
4 Photocell 48V

Dual color medium intensity L-865
(or L-865/L-864 with L-810(F))

RED LIGHT CONTROLER

Part Number	Power supply
113176-240	110 to 240 Vac



1 OFC-RI-240
2 Navilite L-810(F)
3 Red Light controler
4 Photocell 48Vdc

Red medium intensity L-864 and L-810 (F)
with red light controler

- cable inputs by gland nickel plated brass
- 1 to 6 terminal connections for red lights L-810 (F) and L-864
- surge protection
- connection of the photocell, default information of lights
- on/off switch and remote/manual switch to bypass the photocell

FRANCE, Oil and Gas Chimney

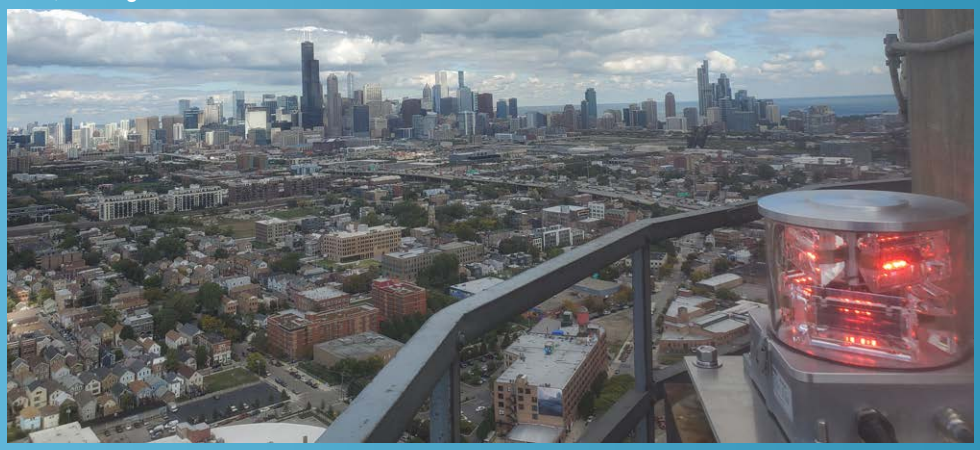
MALAYSIA, Kuala Lumpur

PARIS, Eiffel Tower

Broadcast tower

USA, Texas

USA, Chicago



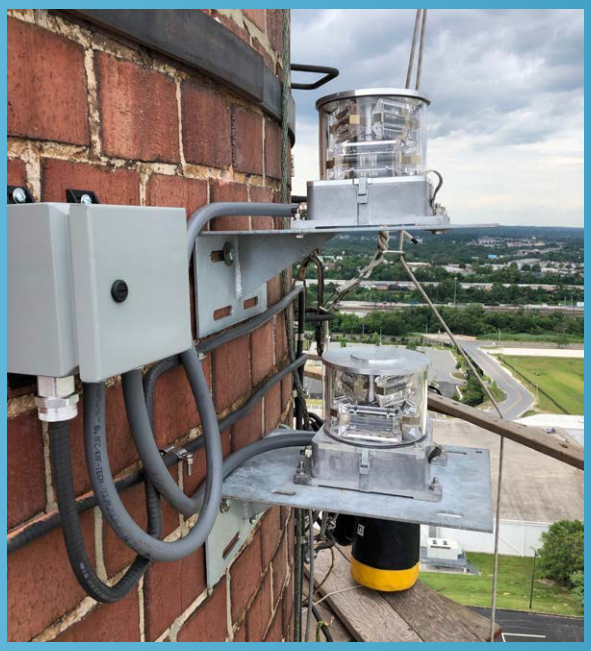
BEIRUT, Damac Vercase Tower

FRANCE, Millau

CRANE IN MONACO

ABU DHABI, Four Seasons Hotel

USA



BRUXELLES, Diegem

RELIABILITY IN OBSTRUCTION LIGHTING

RELIABILITY IN
OBSTRUCTION
LIGHTING

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