

# F865 AC LED Medium Intensity White Aviation Obstruction Light

•Night: White 2000cd±25% •Day: White 20,000cd±25% •90-264VAC,50-60Hz



## OVERVIEW

F865 medium intensity white beacon AC system consists of a 48VDC F865 flash head and a 480W power converter box.

The 48VDC F865 light head can operate range from 24VDC to 48VDC. Incorporated a microcontroller, it flashes white light 20,000 candelas at daytime automatically dims to 2,000 candelas at nighttime. F865's LED module consists of 56 OSRAM super-power white LEDs. The optical design ensures the effective intensity and spread beam meet the criteria of FAA L-865 and ICAO medium intensity type A.

The 480W converter box is capable of converting universal AC (90-264VAC) to 48VDC for powering the F865 48VDC light head. F865 AC system is an ideal solution where the power module can be easily accessible to be maintained.

F865 medium intensity LED obstruction light can work independently with self-controlled configurations (e.g., built-in photocell, flashing program, GPS) as an economical solution. In a central controlling and monitoring system, a CB3 control box can connect multiple levels of F865 beacons to achieve synchronous or sequential flashing.

The white medium intensity obstruction light is usually used for unpainted structures over 105m, such as radio and TV towers, chimneys, cooling towers and skyscrapers.

## COMPLIANCE

- Obstacle Light Medium Intensity Type A, ICAO Annex 14 Volume I July 2016
- FAA AC No. 150/5345-43, L-865
- DGAC Mexico

## APPLICATIONS

- Telecommunication Tower
- TV/Radio Tower
- Transmission Tower
- High-rise building
- Industrial Chimney & Cooling Tower
- Tower Crane
- Bridge
- Wind turbine
- Airfield & helipad
- Storage tank & Water tower
- Oil & Gas offshore platform

## FEATURES

- F865-DC light unit operation voltage: 24-48VDC
- 480W power converter module input voltage: 90-264VAC, efficiency over 90%, easy to maintain
- Super-bright OSRAM white LEDs, reliable light source ensures long lifespan
- Efficient photometric design provides excellent light distribution
- Internal LED driver and constant current regulator make the light illuminate steadily
- Illuminating 20,000cd at day and automatically reducing to 2,000cd at night
- Aluminum heatsink provides excellent thermal dissipation performance
- Powder-painted aluminum base provides good weather and corrosion resistant
- Protective vent for balancing pressure and reducing condensation
- Excellent shock and vibration resistant
- UV-stabilized lens, high temperature resistant
- Built-in 20KA surge protector module to protect the light from induction lightning strike
- A handle on the light shoulder makes carrying and lifting easier for deployment
- Prewired cable makes wiring job easier
- Protection: Polarity reverse, overvoltage and shortcircuit
- Optional functions available: alarm relay/GPS
- IP67 waterproof protection



## SPECIFICATIONS

Item		F865D48 Specifications
LIGHT OUTPUT	Effective Intensity	20,000cd±25% at day & twilight; 2,000cd±25% at night
	Vertical beam	>3°
	Horizontal Spread	360°
	Light Source	OSRAM LEDs
	LED Color	White
	LED Lifespan	100,000 Hours
OPERATION	Flash Pattern	20-60FPM (40FPM as default)
POWER SUPPLY	Operation voltage	24-48VDC
	Peak Power	620W@day; 180W@night
	Power Consumption@40FPM	92W@day; 23W@night
MECHANICAL STRUCTURE	Lens	<b>Photometric lens:</b> Polycarbonate, UV Stabilized <b>Outer lens:</b> Acrylic, UV Stabilized
	Body	Powder-coated extruding aluminum
	Mounting	Four 16*25mm slot holes on bottom 200 mm PCD
	Net Weight	8KG
	Dimension(W*H)	235mm*360mm
	Protection	IP67
	Operation Temperature	-40°C~+70°C
	Operation Humidity	0-95% RH non-condensing
	Wind resistance	Max.240kph
OTHERS	Optional	•Dry alarm contacts •GPS
	Warranty	5 years

Item		PSUA220D48-480 Specifications
INPUT	Input voltage	90-264VAC, 50-60Hz
	Power Factor	PF>0.95/230VAC PF>0.98/115VAC at full load
	Efficiency	94%
OUTPUT	Output voltage	48VDC (48-55VDC adjustable)
	Rated power & current	480W, 10A
	Peak power & current	720W, 15A
MECHANICAL STRUCTURE	Enclosure Type	Outdoor
	Enclosure Material	SS304
	Protection	IP65
	Weight	6KG
	Dimension (H*W*Depth)	300*250*200mm
	Operation Temperature	-25°C~+70°C
	Operation Humidity	20-95% RH non-condensing
Mounting	Wall mounting or U-bolt mounting	

## ORDERING CODE

ORDERING CODE of F865D48 light head				
Main P/N	Voltage	Photosensor <sup>(Note1)</sup>	Alarm Relay <sup>(Note2)</sup>	GPS
F865	D48 (48VDC)	P (with photosensor)	[Blank] (without dry Contacts) R (with dry Contacts)	[Blank] (Without GPS) GPS (With GPS)

Notes: 1) Built-in photocell is a must for F865 white beacon to detect background lux level for automatically switching intensity level between day and night.

2) Form C type dry contacts, both NO and NC available.

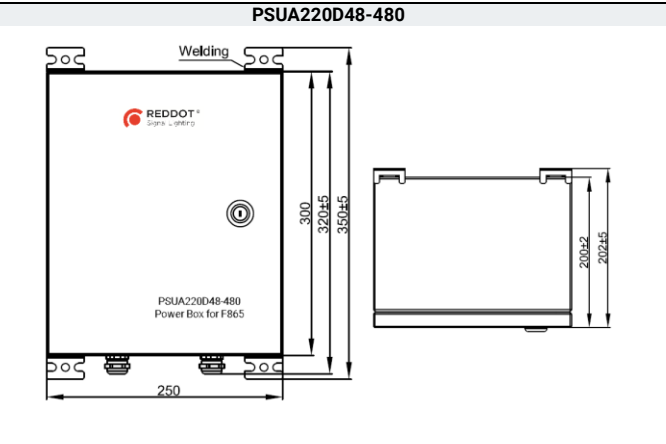
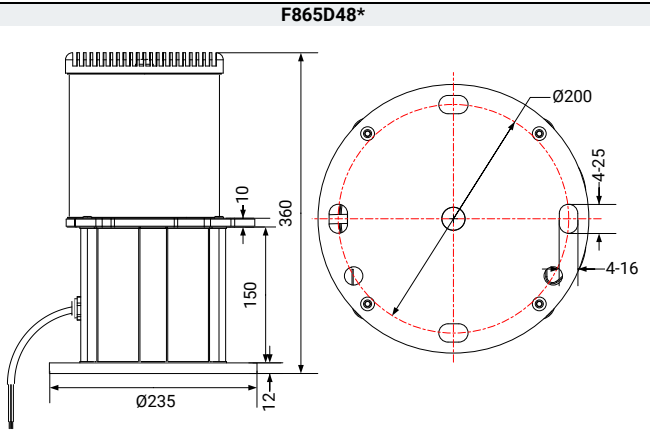
E.g.: F865D48-P-GPS = Medium intensity white beacon, 48VDC, white flashing, 2000cd at night 20,000cd at day, MIOL-A with built-in photocell, with GPS

ORDERING CODE of PSUA220D48-960			
Series	AC Input voltage	DC Output voltage	Converter Power
PSU	A220 (90-264VAC)	D48 (48VDC)	480

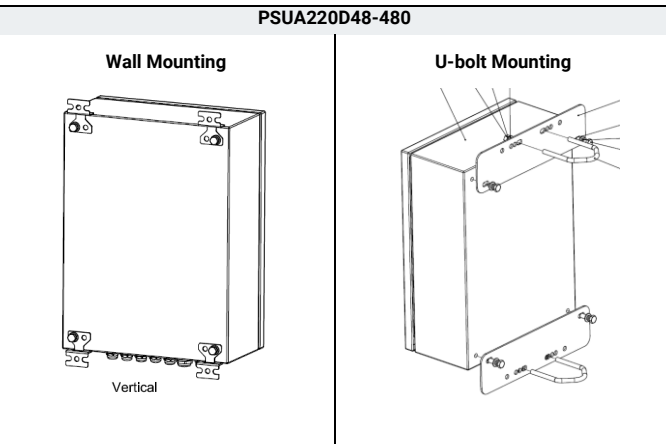
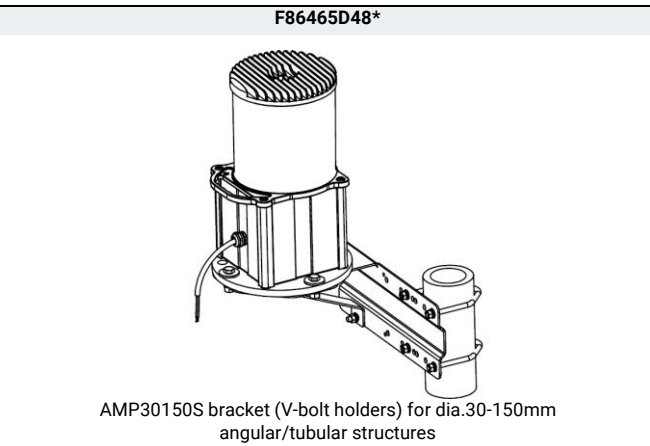
Note: PSUA220D48-480 is the ordering code of power box of F865 AC system with one F865D48\* unit.



## DIMENSIONS



## MOUNTING



## WIRING DIAGRAM

