

Medium-Intensity Aviation Light

ICAO Medium-Intensity Type A 20 000 cd
ICAO Medium-Intensity Type B/C 2 000 cd

OBELUX
AVIATION LIGHTS

Obelux Oy, Kutomotie 6 B, 00380 Helsinki FINLAND | The information in this document is subject to change without notice.

© Obelux Oy 2020

Optical characteristics

- ▶ 20 000cd WHITE / 2 000cd WHITE
- ▶ 20.000cd WHITE / 2.000cd RED
- ▶ RED configurable for 200cd
- ▶ Colour aviation WHITE and RED
- ▶ NVG compliant infrared (850nm) as an option
- ▶ Horizontal beam 360°
- ▶ Vertical beam >3°



Medium-Intensity White and Red Dual or White only LED Aviation Obstruction Lights

Obelux Medium-Intensity stand-alone 20 000 cd White and Red Dual model or White only model are used for marking tall structures, such as wind turbines, transmission masts, chimneys, broadcast masts, etc. The product offers unique features such as possibility to be configured as Medium Intensity white only or dual, i.e. white and red, incorporated fault monitoring, photocell, GPS synchronization, infrared and support for both stand-alone and Modbus operation as a part of Obelux aviation light system network.

Design to meet

ICAO International Standards and Recommended Practices: Aerodromes Annex 14 Volume 1, 8th Edition, July 2018, Chapter 6: Medium-intensity Type A. Medium-intensity Type B/C. Fulfills the Recommendations Section in Table 6-3.

Regulatory article of April 23, 2018 relating to the implementation of obstruction warning light to air navigation, DGAC, STAC, (FRANCE)

Key Features

- ▶ Based on LED technology
- ▶ 20 000 cd WHITE flashing and RED fixed or flashing
- ▶ Supports both stand-alone and RS-485 Modbus operations
- ▶ Suitable for Offshore environment
- ▶ Built-in GPS synchronisation
- ▶ Infrared as an option
- ▶ Visibility sensor interface controlled luminous output levels 10%, 30% and 100%
- ▶ Built-in photocell and fault monitoring
- ▶ Hot start for radar-controlled systems
- ▶ Design lifetime more than 20 years

Electrical Characteristics

- ▶ Operating voltage (AC):
Nominal 100-240V_{AC} ± 10%, 50Hz / 60Hz ± 6%
(Range 90-265V_{AC})
- ▶ Operating voltage (DC): 20-60V_{DC}
- ▶ Flash rates: 20/30/40/60 fpm
- ▶ Meets standards:
EMC (Emissions): EN 61000-6-4
EMC (Immunity): EN 61000-6-2
- ▶ Power consumption for ACW versions
 - 14W @ Day (WHITE, 40 fpm)
 - 3W @ Night (WHITE, 40 fpm)
 - 4,5W @ Night (WHITE+IR, 40 fpm)
 - 6 W @ Night (RED, 40 fpm)
 - 9 W @ Night (RED+IR, 40 fpm)
 - 26W @ Night (RED, fixed)
 - 30W @ Night (RED+IR, fixed)
- ▶ Alarm relay output NO/NC dry contact
Switch voltage/current max: 50VDC / 1A, 250VAC / 10A
- ▶ ModBUS RS-485 isolated 4,5kV

Additional Factory-Installed Options

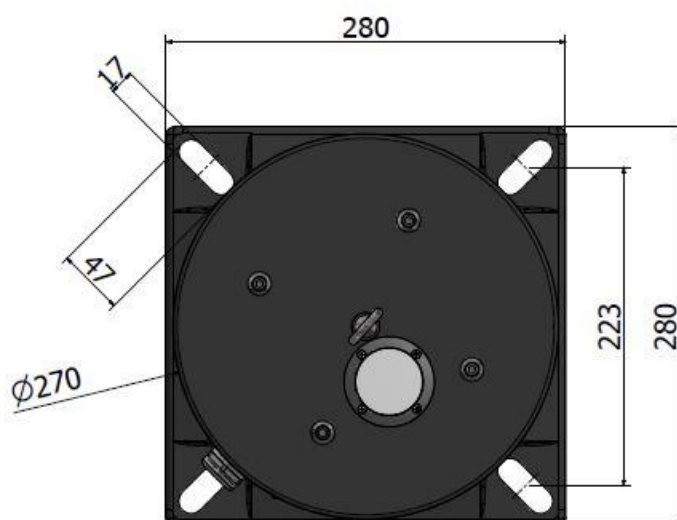
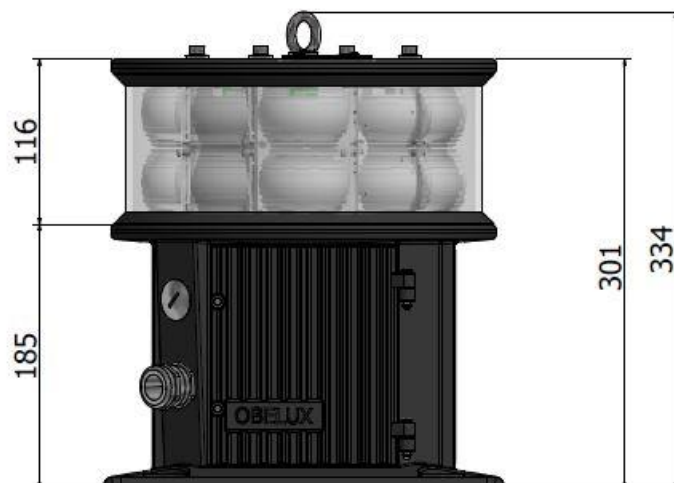
- ▶ NVG compliant infrared (IR)
- ▶ 4 Input 4 Output (IO)
- ▶ Ethernet Interface:
 - 1 x RJ-45 copper (E)
 - 4 port switch: 2 x Fiber SC multimode Female, 2 x RJ45 copper (EF)

Recommended Cables

- ▶ For ACW versions:
 - Power (L-N-PE): 3x1,5mm² or 3x2,5mm²
 - Data: 3x0,75 mm² – 3x1,0 mm² shielded or CAT6
 - Alarm: CAT 6, 3x1,5mm² or 3x2,5mm²
 - Power + Alarm: 6x1,5mm² or 6x2,5mm²
- ▶ Terminals can be used to distribute power and data to another light head (6 core cable must be used).

Mechanical Characteristics

- ▶ Painted marine grade aluminium body (C5MHigh)
- ▶ Glass cover
- ▶ Degree of protection IP66
- ▶ Operating temperature range -40...+55 °C
- ▶ Mounting 240x240mm, Ø17mm
- ▶ Height 334 mm, diameter 270 mm
- ▶ Weight 12 kg
- ▶ Packing dimensions and weight:
460x330x330mm, 15,5kg



20 000 cd / 2 000 cd WHITE and RED products

Order code	Output	ICAO	Operating voltage	GPS sync.	RED	Infrared	CCV	Photocell and Fault monitoring	Alarm Relay	ModBUS
MID-ICAO-ACWGAM-X	20 000 cd	Type A+B/C	100-240VAC	Yes	Yes	No	Yes	Yes	Yes	Yes
MID-ICAO-ACWIRGAM-X	20 000 cd	Type A+B/C	100-240VAC	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MID-ICAO-DCGAM-X	20 000 cd	Type A+B/C	20-60VDC	Yes	Yes	No	Yes	Yes	Yes	Yes
MID-ICAO-DCIRGAM-X	20 000 cd	Type A+B/C	20-60VDC	Yes	Yes	Yes	Yes	Yes	Yes	Yes

X:

{ } = Without any extension board

IO = Including 4 Input 4 Output (IO) interface

E = Ethernet interface with 1 x RJ-45 copper connector

EF = 4 port switch:

Ethernet interface with 2 x RJ-45 copper connector and 2 x Fiber SC multimode female connectors

ICAO:

Medium-intensity Type A = 20 000 cd / 2000 cd WHITE flashing

Medium-intensity Type B = 2000 cd RED flashing

Medium-intensity Type C = 2000 cd RED steady

20 000 cd / 2 000 cd WHITE only products

Order code	Output	ICAO	Operating voltage	GPS sync.	RED	Infrared	CCV	Photocell and Fault monitoring	Alarm Relay	ModBUS
MI-ICAO-ACWGAM-X	20 000 cd	Type A	100-240VAC	Yes	No	No	Yes	Yes	Yes	Yes
MI-ICAO-ACWIRGAM-X	20 000 cd	Type A	100-240VAC	Yes	No	Yes	Yes	Yes	Yes	Yes
MI-ICAO-DCGAM-X	20 000 cd	Type A	20-60VDC	Yes	No	No	Yes	Yes	Yes	Yes
MI-ICAO-DCIRGAM-X	20 000 cd	Type A	20-60VDC	Yes	No	Yes	Yes	Yes	Yes	Yes

X:

{ } = Without any extension board

IO = Including 4 Input 4 Output (IO) interface

E = Ethernet interface with 1 x RJ-45 copper connector

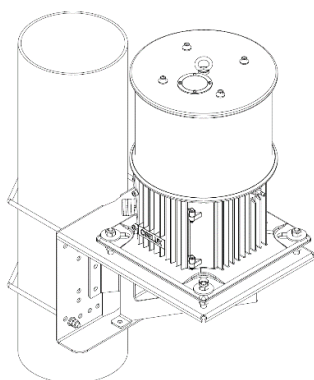
EF = 4 port switch:

Ethernet interface with 2 x RJ-45 copper connector and 2 x Fiber SC multimode female connectors

ICAO:

Medium-intensity Type A = 20 000 cd / 2000 cd WHITE flashing

Available mounting set options:



Obelux MS-MIV1001 / MS-MIV1002

Mounting set for wall mounting and for 60-200mm tubes.

This mounting set includes:

- ▶ 2 pcs U-bolt 60-100 A4
- ▶ 2 pcs U-bolt 100-200 A4
- ▶ 8 pcs M8 hex nut A4 ISO 4161
- ▶ 8 pcs M8 hex nut A4 ISO 4032
- ▶ 8 pcs M10 hex nut A4 ISO 4032
- ▶ 4 pcs M10 hex nut A4 ISO 4161
- ▶ 4 pcs M12 washer A4 ISO 7089

Easy horizontal adjustment / installation.

More detailed mechanical data: see MS-MIV1001/1002 datasheet

- ▶ Order Code MS-MIV1001 (Mounting bracket is AISI304 stainless steel)
- ▶ Order Code MS-MIV1002 (Mounting bracket is AISI316 acid-proof steel)