

DATASHEET

# Low-Intensity Infrared SAL

ICAO Low-intensity Type A 10cd and Type B 32cd  
FAA L-810  
Infrared 850nm

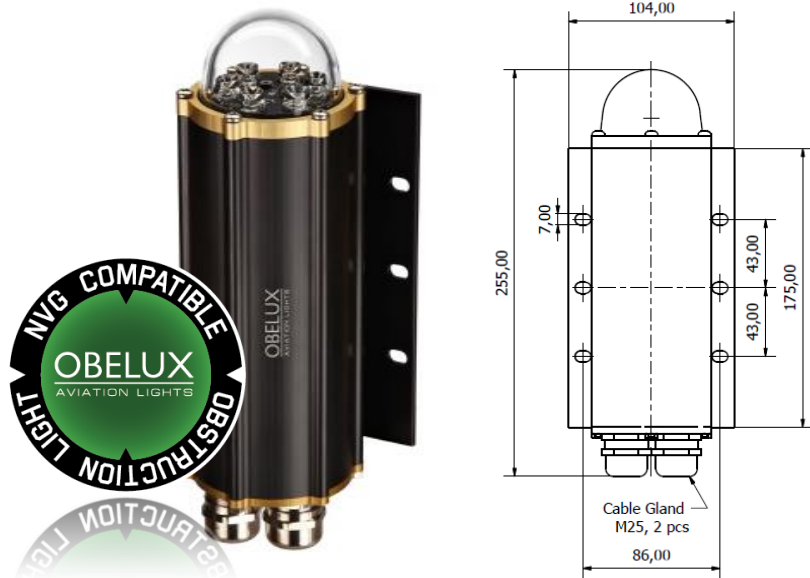
**OBELUX**  
AVIATION LIGHTS

Obelux Oy, Kutumotie 6 B, 00380 Helsinki FINLAND | The information in this document is subject to change without notice. © Obelux Oy 2014

WWW.OBELUX.COM

## Optical characteristics

- ▶ 10cd fixed or flashing
- ▶ 32cd fixed or flashing
- ▶ Colour aviation RED
- ▶ Horizontal beam 360°
- ▶ Vertical beam +6°...+10°
- ▶ Infrared 850nm



## Low-Intensity 10 and 32cd with Infrared 850nm Stand-alone

LED Aviation Obstruction Lights

Obelux low-intensity light incorporates infrared which makes it completely Night Vision Goggle (NVG) compatible obstruction light. The light is designed for marking tall structures such as wind turbines, chimneys, masts, and towers. The product offers unique features such as fault monitoring, photocell and switcher incorporated in the light.

## Specifications met

ICAO International Standards and Recommended Practices:  
Aerodromes Annex 14 Volume 1,  
5th Edition, July 2009, Chapter 6:  
Low-intensity Type A  
Low-intensity Type B

FAA Advisory Circular  
AC 150/5345-43G: L-810

Finnish Civil Aviation Authority, TraFi

## Key Features

- ▶ Based on LED-technology
- ▶ 10cd and 32cd RED fixed and flashing light
- ▶ Incorporated infrared 850nm light
- ▶ Incorporated photocell and fault monitoring
- ▶ Extremely low-power consumption
- ▶ More than 10 years of maintenance free operating time
- ▶ 5 year warranty

DATASHEET

# Low-Intensity Infrared SAL

ICAO Low-intensity Type A 10cd and Type B 32cd  
FAA L-810  
Infrared 850nm

**OBELUX**  
AVIATION LIGHTS

Obelux Oy, Kutomotie 6 B, 00380 Helsinki FINLAND | The information in this document is subject to change without notice. © Obelux Oy 2014

WWW.OBELUX.COM

## Electrical Characteristics

- ▶ ACW- models, wide AC voltage range:  
Nominal  $100...240V_{AC}$ , Nominal 50 ... 60Hz
- ▶ DCW- models, wide DC voltage range:  
Nominal  $10...60V_{DC}$
- ▶ Overvoltage protection
- ▶ Constant power input by active PFC
- ▶ Day/Night switch (400/800/1600lux)
- ▶ Flash rates: 20/40/60fpm
- ▶ Power consumption 4-7W

## Mechanical Characteristics

- ▶ Anodized, marine grade aluminium body and end parts
- ▶ AISI316 acid-proof stainless steel screws
- ▶ Glass cover, degree of protection IP65
- ▶ Operating temperature range  $-40...+55\text{ }^{\circ}\text{C}$
- ▶ Height 255 mm, diameter 104 mm
- ▶ Weight 1,3 kg (without mounting set)
- ▶ Terminal block for  $1.5...4\text{mm}^2$  wires

## Mounting Set Options

- ▶ MS-HV80
- ▶ MS-EV60
- ▶ MS-EV100
- ▶ MS-EV150
- ▶ MS-DEV60
- ▶ MS-DEV100
- ▶ MS-RW
- ▶ MS-LVU
- ▶ MS-N1B



Order code	ICAO / FAA	Output	Op. volt.	Power cons.	Fault monitoring	Built-in photocell	Packing dimensions
LI-10+IR-DCW-A	Type A	10cd	10-60VDC	4 W	Yes	Yes	280x130x100, 1,5kg
LI-10+IR-ACW-A	Type A	10cd	100-240VAC	7 VA	Yes	Yes	280x130x100, 1,5kg
LI-32+IR-DCW-A	Type B / L-810	32cd	10-60VDC	7 W	Yes	Yes	280x130x100, 1,5kg
LI-32+IR-ACW-A	Type B / L-810	32cd	100-240VAC	9 VA	Yes	Yes	280x130x100, 1,5kg

### Mounting sets

<b>MS-HV80</b>	Mounting set, basic model for 33 to 80 mm pipes
<b>MS-EV60</b>	Mounting set with extension plate for 30 to 60 mm pipes
<b>MS-EV100</b>	Mounting set with extension plate for 60 to 100 mm pipes
<b>MS-EV150</b>	Mounting set with extension plate for 100 to 150 mm pipes
<b>MS-DEV60</b>	Mounting set for double lights with extension plate for 30 to 60 mm pipes
<b>MS-DEV100</b>	Mounting set for double lights with extension plate for 60 to 100 mm pipes
<b>MS-RW</b>	Mounting set with extension plate for roof or wall mounting
<b>MS-LVU</b>	Mounting set with extension plate for L, V, and U-profiles, galvanized
<b>MS-N1B</b>	Mounting set with 1" NPT at bottom

# Low-Intensity Infrared SAL

ICAO Low-intensity Type A 10cd and Type B 32cd  
FAA L-810  
Infrared 850nm

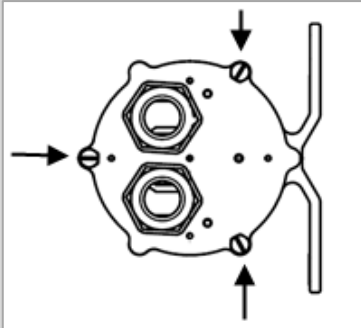
**OBELUX**  
AVIATION LIGHTS

## Installation specifications

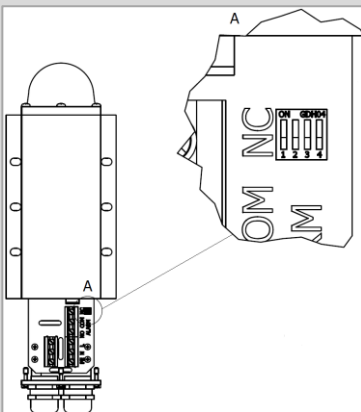
- ▶ Cable gland M25
- ▶ Cable diameter 11 to 17mm
- ▶ Wire diameter max. 6mm<sup>2</sup>
- ▶ Recommended cable 3x1.5mm<sup>2</sup> or 3x2.5mm<sup>2</sup>

## Options

- ▶ CGS-20 Smaller cable glands  
Set includes 2 pcs M20 cable glands with M25-M20 adapters for 7-13 mm cables



1. Bottom plate screws



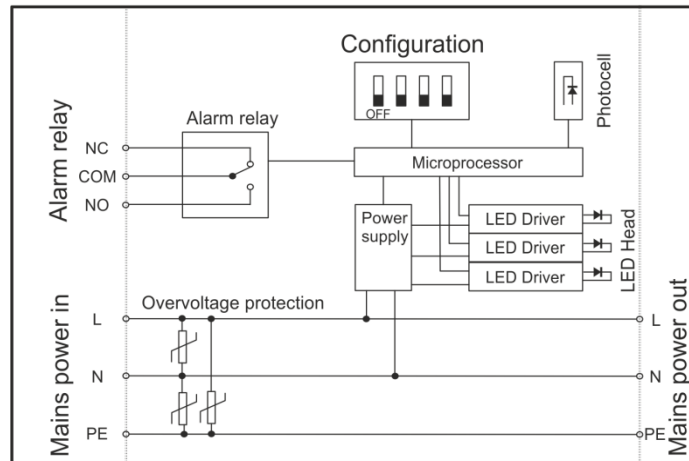
2. Location of DIP switches

## Electrical installation instructions

Obelux LI SAL Series have two cable glands for easy chaining without external distribution boxes. Connection can be protected with a 6A or 10A fuse or with a circuit breaker (C curve: C6A or C10A).

## Configuring Obelux LI SAL Series

Photocell mode (enabled/disabled) and threshold (400 lux, 800 lux or 1600 lux) can be selected by the user using DIP configuration switches. Open three screws on the bottom of Obelux light to gain access to DIP switches. We recommend using a socket wrench but the screws can also be opened with a suitable flat-head screwdriver. Holding the aviation obstacle light glass dome pointing upwards, the individual DIP switches are numbered 1-4 from left to right.



3. Block diagram of Obelux LI+IR stand-alone light.

DIP Switch Settings–Photocell mode			DIP Switch Settings–Flash mode		
<b>1</b>	<b>2</b>	Operating mode	<b>3</b>	<b>4</b>	Operating mode
<b>OFF</b>	<b>OFF</b>	Photocell disabled	<b>OFF</b>	<b>OFF</b>	Steady-burning i.e.fixed
<b>ON</b>	<b>OFF</b>	400 lx	<b>ON</b>	<b>OFF</b>	20 flashes per minute
<b>OFF</b>	<b>ON</b>	800 lx	<b>OFF</b>	<b>ON</b>	40 flashes per minute
<b>ON</b>	<b>ON</b>	1600 lx	<b>ON</b>	<b>ON</b>	60 flashes per minute

Factory default setting is all switches in OFF (steady-burning mode without photocell control). Turn-off time in 3 min, turn-on time is 10 sec. When the photocell operation is enabled, the obstruction light turns on when the ambient light level has dropped below selected level for ten seconds. Light turns off when the ambient light level has exceeded the selected value for more than three minutes.



DATASHEET

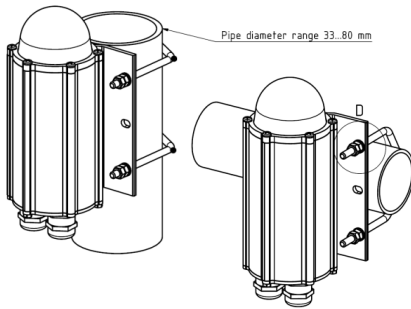
# Low-Intensity Infrared SAL

ICAO Low-intensity Type A 10cd and Type B 32cd  
FAA L-810  
Infrared 850nm

**OBELUX**  
AVIATION LIGHTS

Obelux Oy, Kutomotie 6 B, 00380 Helsinki FINLAND | The information in this document is subject to change without notice. © Obelux Oy 2014

WWW.OBELUX.COM



### Obelux MS-HV80

Mounting set for 33-80 mm vertical or horizontal pipe.

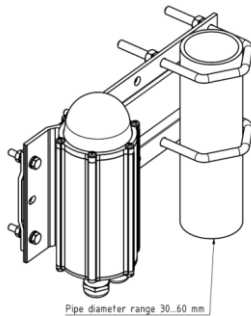
This mounting set includes:

- ▶ 2 pcs M6 U-bolt
- ▶ 8 pcs M6 hex nut
- ▶ 4 pcs 6/12 mm washer

All parts are AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-HV80 datasheet

▶ Order Code MS-HV80



### Obelux MS-EV60

Mounting set with extension plate for 30-60 mm vertical pipe installation.

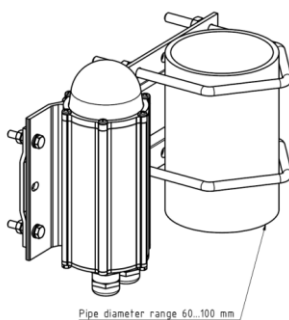
This mounting set includes:

- ▶ 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- ▶ 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- ▶ 1 pcs extension plate

Extension plate marine grade anodized aluminium, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-EV60 datasheet

▶ Order Code: MS-EV60



### Obelux MS-EV100

Mounting set with extension plate for 60-100 mm vertical pipe installation.

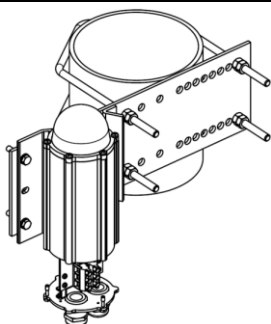
This mounting set includes:

- ▶ 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- ▶ 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- ▶ 1 pcs extension plate

Extension plate marine grade anodized aluminium, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-EV100 datasheet

▶ Order Code: MS-EV100



### Obelux MS-EV150

Mounting set with extension plate for 100-150 mm vertical pipe installation.

This mounting set includes:

- ▶ 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- ▶ 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- ▶ 1 pcs extension plate

Extension plate hot dipped galvanised steel, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-EV150 datasheet

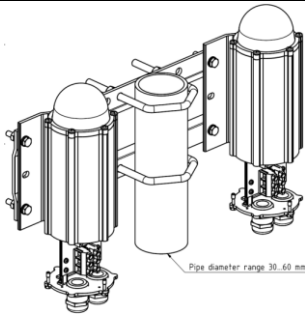
▶ Order Code: MS-EV150

DATASHEET

# Low-Intensity Infrared SAL

ICAO Low-intensity Type A 10cd and Type B 32cd  
FAA L-810  
Infrared 850nm

**OBELUX**  
AVIATION LIGHTS



### Obelux MS-DEV60

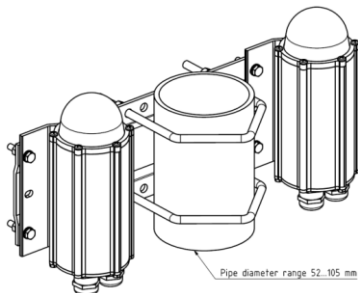
Double mounting set with extension plate for 30-60 mm vertical pipe installation. Mounting set include:

- ▶ 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- ▶ 8 pcs M6x30 bolt, 16 pcs M6 hex nut, 8 pcs 6/12 washer
- ▶ 1 pcs extension plate

Extension plate marine grade anodised aluminium, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-DEV60 datasheet

▶ **Order Code: MS-DEV60**



### Obelux MS-DEV100

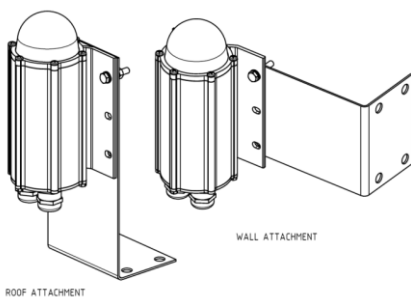
Double mounting set with extension plate for 60-100 mm vertical pipe installation. Mounting set include:

- ▶ 2 pcs M8 U-bolt, 8 pcs M8 hex nut
- ▶ 8 pcs M6x30 bolt, 16 pcs M6 hex nut, 8 pcs 6/12 washer
- ▶ 1 pcs extension plate

Extension plate marine grade anodised aluminium, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-DEV100 datasheet

▶ **Order Code: MS-DEV100**



### Obelux MS-RW

Mounting set for horizontal plate or wall installation.

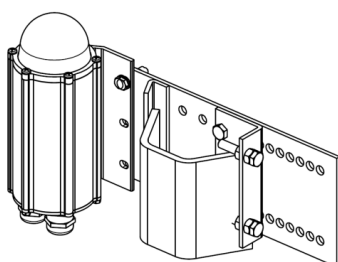
Mounting set includes:

- ▶ 4 pcs M6x30 bolt, 8 pcs M6 hex nut, 4 pcs 6/12 washer
- ▶ 1 pcs L-shape 2 mm plate

All parts AISI 316 acid-proof stainless steel.

More detailed mechanical data: see MS-RW datasheet

▶ **Order Code: MS-RW**



### Obelux MS-LVU

Mounting set for L and V -shape profiles

Mounting set includes:

- ▶ 1 set accessories for light unit fitting to plate
- ▶ 1 pcs extension plate with adjusting plate and accessories

Extension plate hot dip galvanized steel, other parts AISI316 acid-proof stainless steel.

More detailed mechanical data: see MS-LVU datasheet

▶ **Order Code: MS-LVU** (with galvanized extension plate)

▶ **Order Code: MS-LVA** (with AISI316 extension plate)

DATASHEET

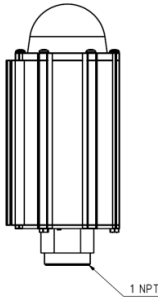
# Low-Intensity Infrared SAL

ICAO Low-intensity Type A 10cd and Type B 32cd  
FAA L-810  
Infrared 850nm

**OBELUX**  
AVIATION LIGHTS

Obelux Oy, Kutomotie 6 B, 00380 Helsinki FINLAND | The information in this document is subject to change without notice. © Obelux Oy 2014

WWW.OBELUX.COM



**Obelux MS-N1B :**  
Mounting set for 1" NPT at bottom

More detailed mechanical dimensions: see MS-N1B datasheet.

► **Order Code: MS-N1B**