

InfraLUX HighPower IR-LED

OPERATING INSTRUCTIONS



BEFORE INSTALLATION AND OPERATION PLEASE READ THESE INSTRUCTIONS CAREFULLY.

Dear Customer,
We thank you for choosing our product.
Before installation and operation please read these instructions carefully.

STANDARD

1. Mount illuminator
2. Connect the illuminator cable to the Power Supply (12Vdc)
3. Connect PSU to Mains
4. If necessary, adjust the photocell sensitivity (where applicable)

OPERATIONS

1. Place the illuminator next to camera
2. Adjust Vertical angle
3. Adjust Horizontal angle
4. Lock all screws
5. If necessary, adjust the illuminator light intensity (power can be adjusted through the optional switching power supply for IL150, IL200, IL300, IL400)

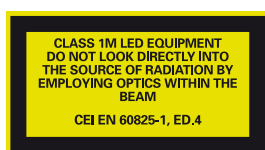
WARNING



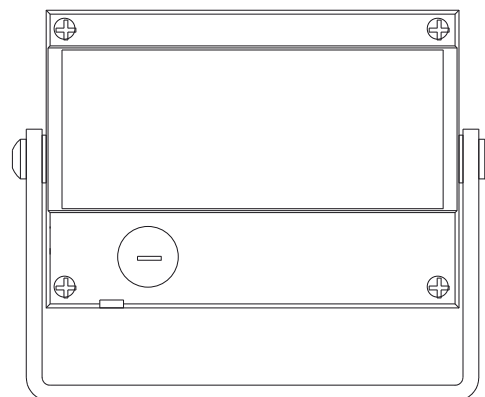
The illuminator must be fed only at low voltage (12Vdc) according to the rating plate data or, alternatively through the optional switching power supply or through an optional power unit.

Do not use other systems and/or power units with ratings differing from plate data.

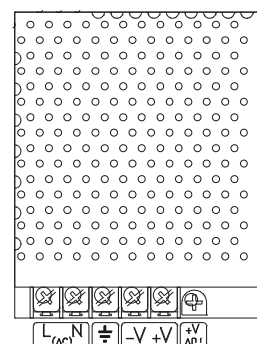
DO NOT EXTEND THE CONNECTION CABLE



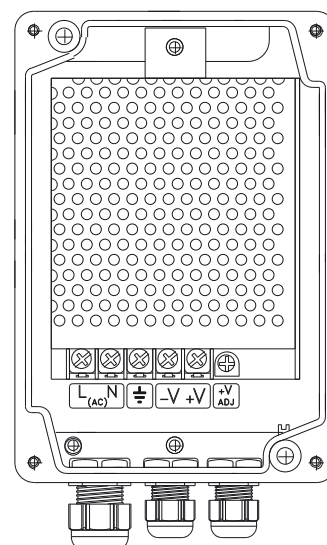
LED Safety Class: 1M
EXEMPT GROUP (EN62471)



InfraLUX illuminatore

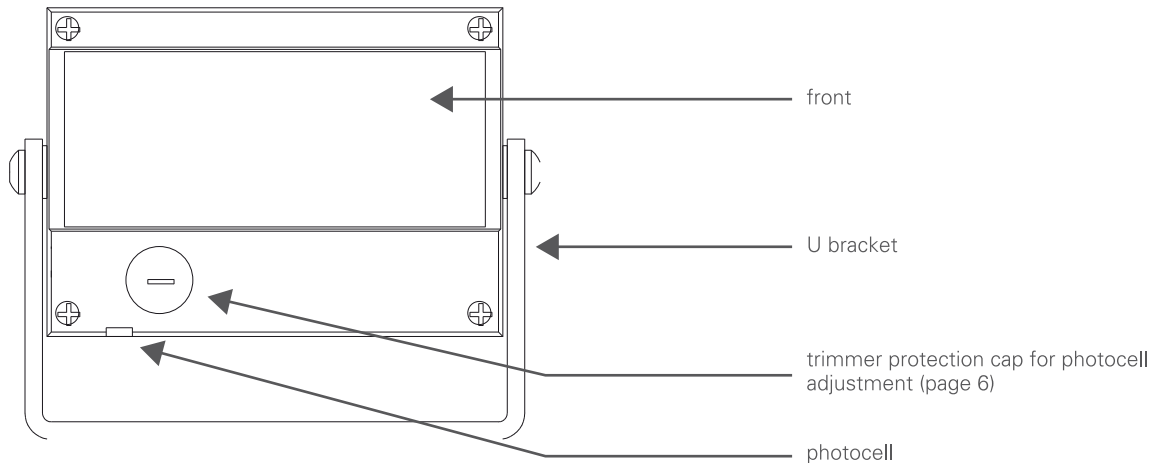


Switching

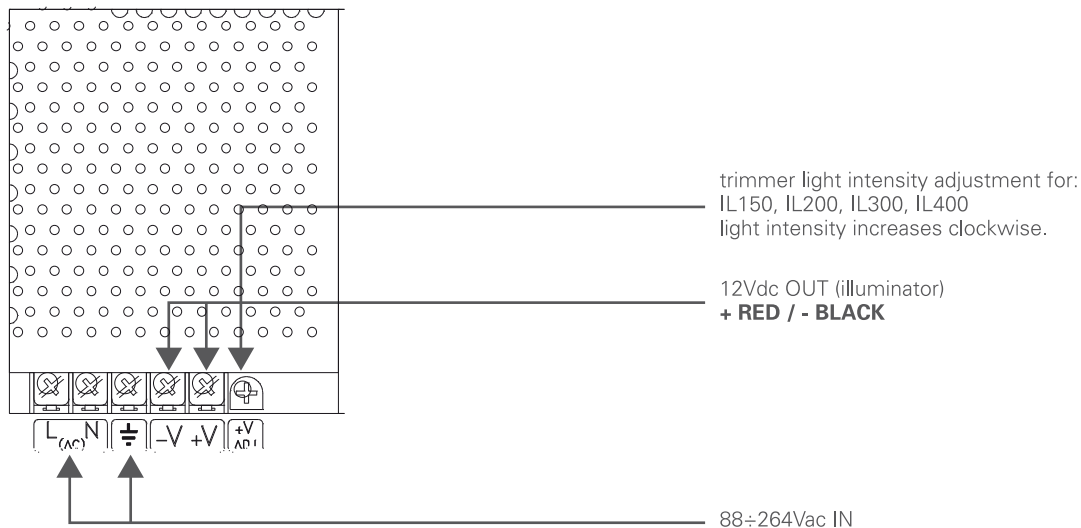


PSU

STANDARD ILLUMINATOR

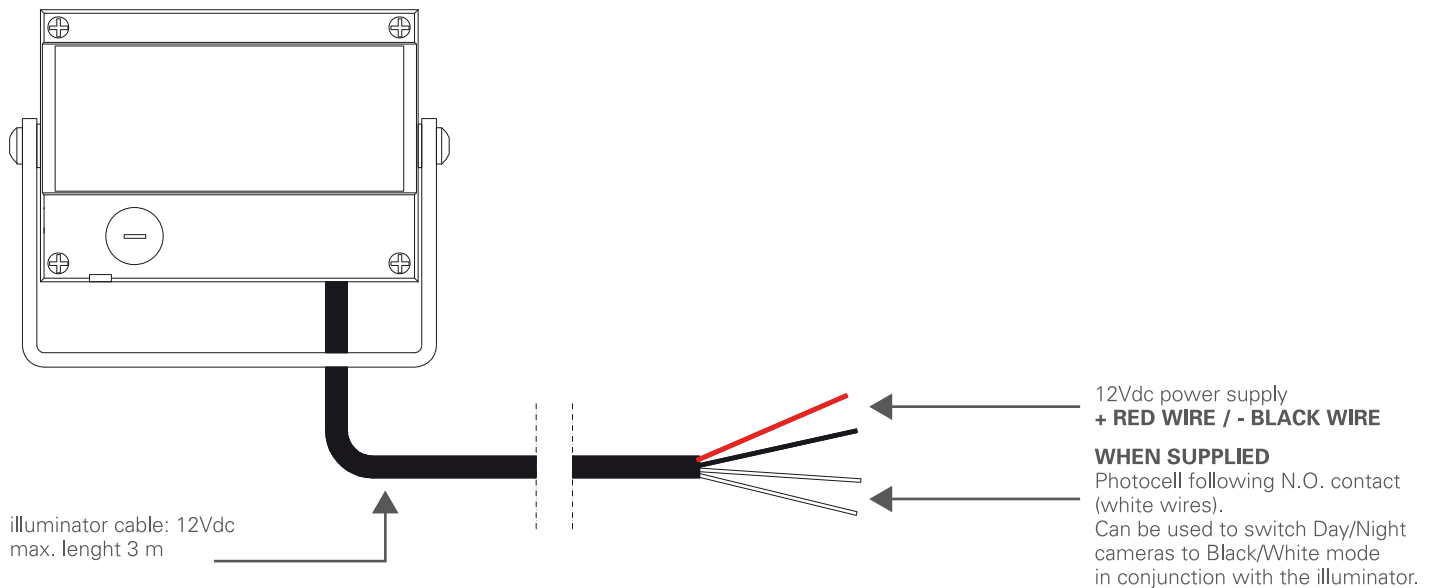


STANDARD SWITCHING



- ⚠ Turn the power off before operating the equipment.
- ⚠ Mount PSU to flat surface.
- ⚠ LEDs guarantee a long service life when used according to operation suggestions. LED reliability is correlated to operating temperature: ventilation must always be guaranteed as much as possible.
- ⚠ For IR light version, it is warmly recommended not to expose human eyes directly to the infrared light beam. Do not view directly with optical instruments (magnifiers). It is advisable to use sunglasses (certified) with dark lenses (solar filter category: 4).
- ⚠ Use a wet cloth for cleaning. No liquid or aerosol detergent must be used. Wipe the screen gently without pressing too hard in order to avoid stains

INSTALLATION



WARNING! Please check cable colours as appropriate: **+ RED WIRE / - BLACK WIRE**

In any case, INFRALUX illuminators are reverse polarity protected. In case of wrong connection, a RED LED indicator will flash (visible through the front cover).

IMPORTANT PRECAUTIONS AND WARNINGS FOR THE PROTECTION OF GOODS AND PERSONS



Turn the power off before operating the equipment.



Installation must be carried out by qualified **technical staff in compliance with current standards and regulations.**



Installation and tools must be in compliance with the property and person security rules: particular attention must be paid to the product use and working limits.



Make sure that after repair and maintenance operations, **all the necessary tests are carried out. Check through the necessary measurements that any part where voltage is present is exposed and could therefore cause possible hazardous situations.**



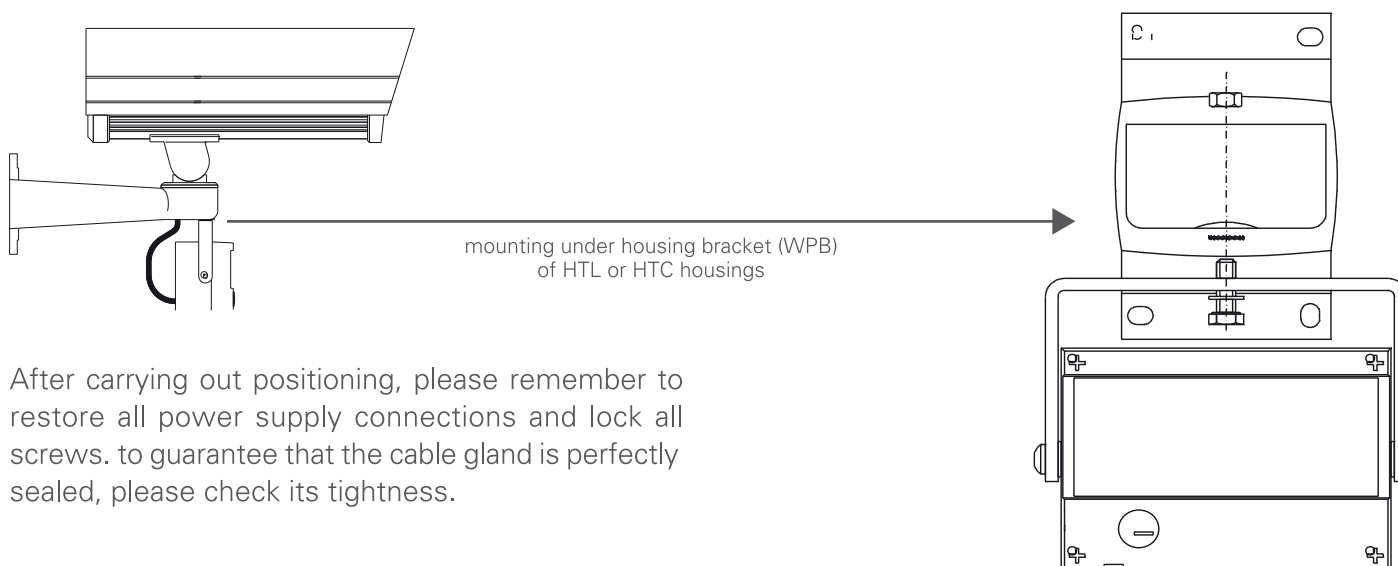
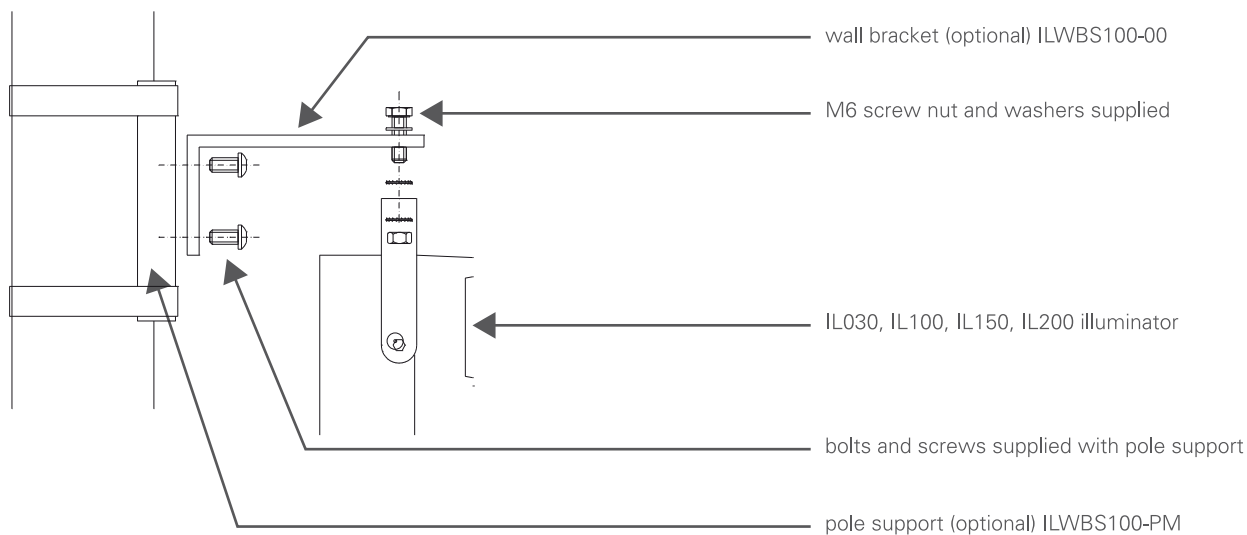
In order to carry out the illuminator fixing **select the adequate support according to the type of installation.** For wall or ceiling mounting make the same amount of holes as indicated in the chosen support: **use the necessary fixing systems according to the type of wall on which the illuminator must be installed**, bearing in mind that fixing screws must have a 6mm diameter.



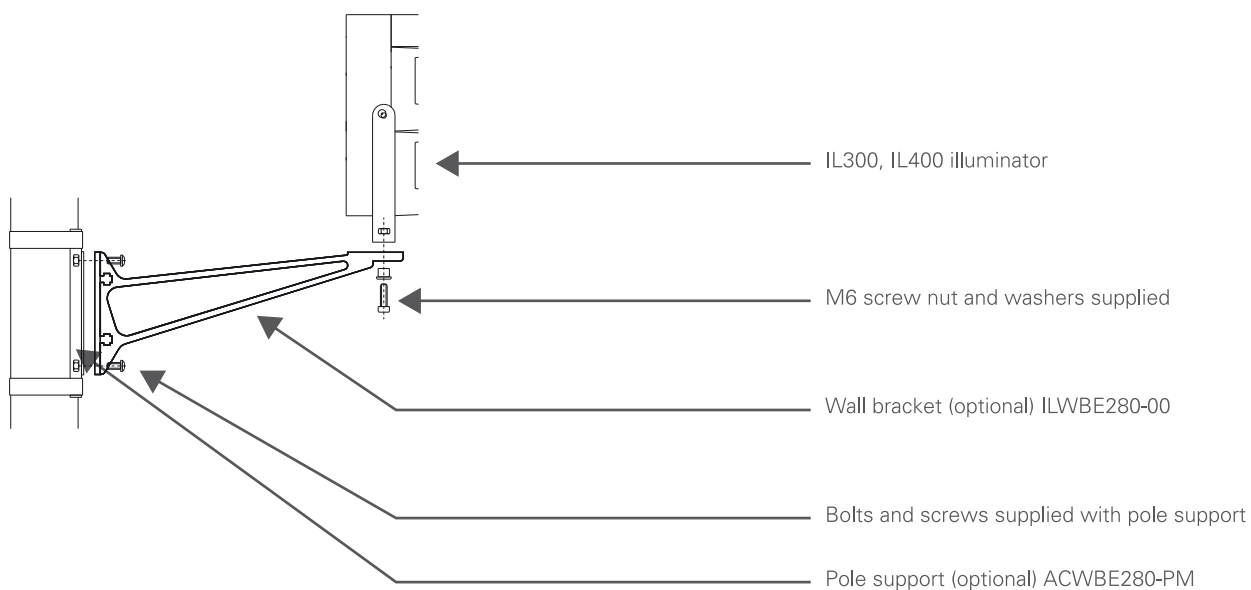
Please do not make any changes to the product without previously contacting the manufacturer which will **formally** provide you with the necessary instructions.

- Please keep these instructions for future reference in case of service or mounting operations.

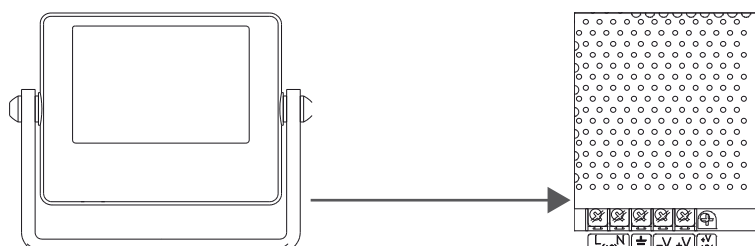
INSTALLATION



After carrying out positioning, please remember to restore all power supply connections and lock all screws. to guarantee that the cable gland is perfectly sealed, please check its tightness.

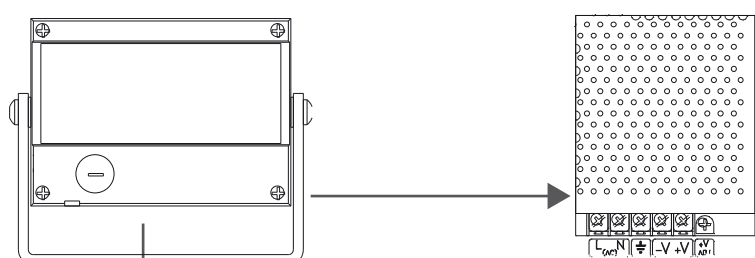


InfraLUX IL030



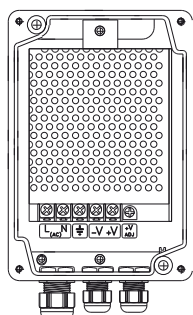
switching
PSRS15-12

InfraLUX IL100 / IL150



switching
PSRS15-12

or:



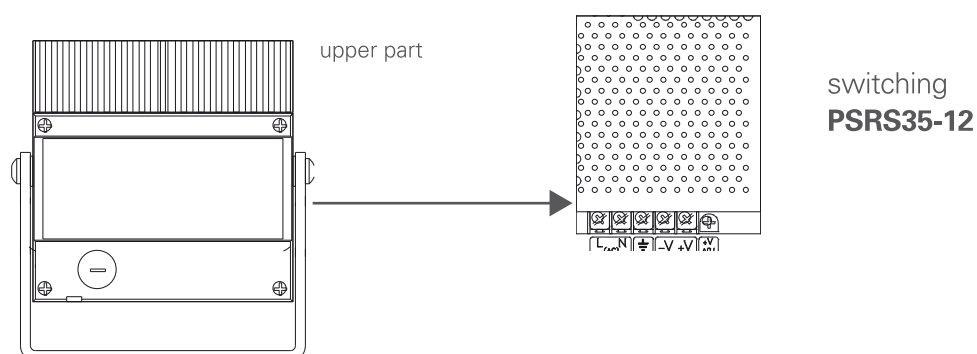
ACBOX3512

Switching power unit supplied with an Aluminium die-casting box and sealed cable glands, 1xPG11+2xPG7.

Particularly suitable for n.1 IL100, n.1 IL150 and n.1 IL200 (also for max .2 illuminators IL100 or IL150; in this case, illuminator cables must be parallel-connected onto the switching terminals).

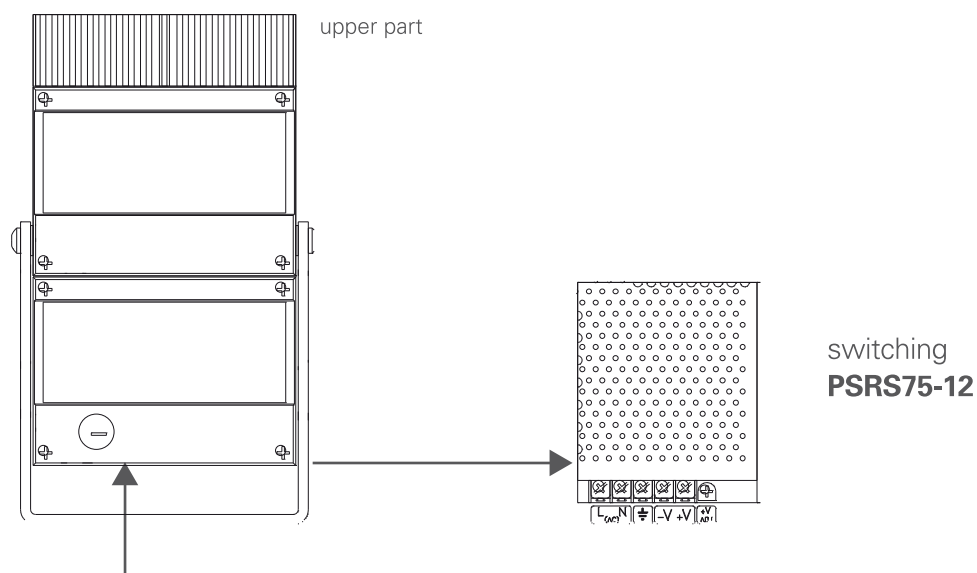
For pole mounting, use the optional plate/support: ACBOX3512-PM.

InfraLUX IL200



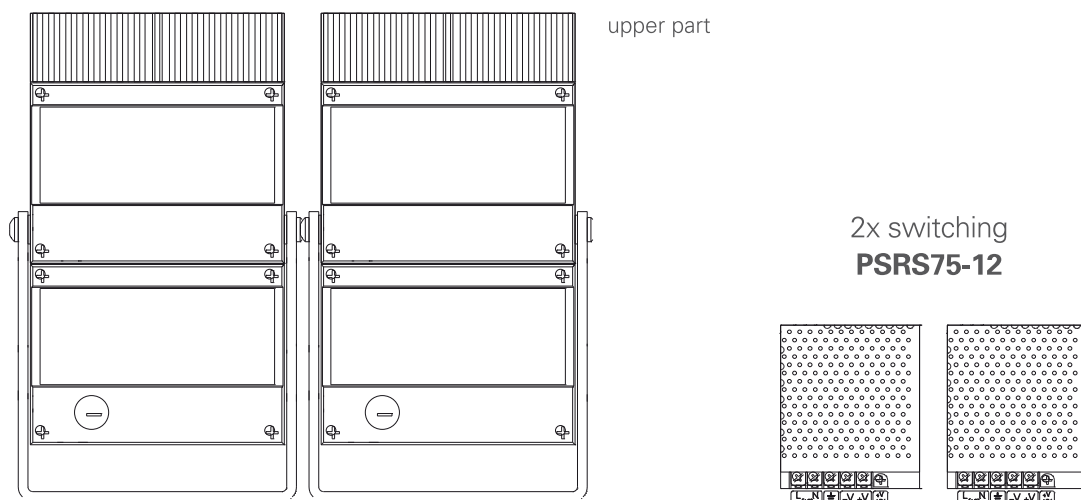
NOTE:
ACBOX3512: power unit supplied with an Aluminium die-casting box and sealed cable glands (page 4)

InfraLUX IL300

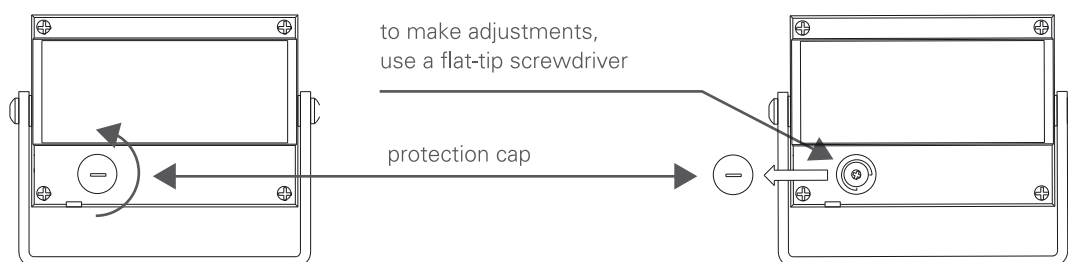


NOTE:
the photocell adjustment circuit is available only on the lower side/cover

InfraLUX IL400



PHOTOCELL ADJUSTMENT (IL100, IL150, IL200, IL300)



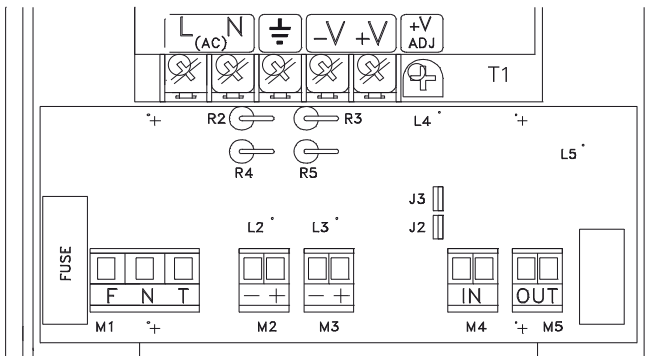
Rotate anticlockwise in order to remove protection (cap) and get access to the photocell adjustment trimmer. Rotate CLOCKWISE to delay switch-on (under low light conditions/night time); rotate ANTICLOCKWISE to anticipate switch-on (under high light conditions/daytime).

NOTE:

by using harnessed power kits (PSBOX35-00, PSBOX75-00 and PSBOX75-TW) the ON-OFF steering circuit can be activated through a remote control: rotate the photocell adjustment trimmer fully ANTICLOCKWISE. Connect the remote control to the M4 terminal in the power pack (page 7).

IL400: the photocell adjustment circuit is available only on the lower side/cover (of each IL300 illuminator).

PSBOX35-00 / PSBOX75-00: connections



M1 88÷264 Vac mains IN

M2 12Vdc Output for illuminator 1

M3 12Vdc Output for illuminator 2 (if wired)

M4 Input: NO/NC* remote control for illuminator switch on/off

M5 Output: NO/NC* switching signal from automatic switch (twilight switch) or remote control input on M4

T1 threshold for illumination intensity adjustment (for IL150, IL200, IL300)

* (NC=on, NO=off)

L2, ON indicates a presence of the power supply on **M2** (ILL.1)

L3, ON indicates a presence of the power supply on **M3** (ILL.2)

L4, ON indicates a presence of remote control input on **M4** (IN)

L5, ON indicates a presence of switching signal on **M5** (OUT)

J2 (for M2) and **J3** (for M3), normally inserted; remove when switch ON/OFF of the illuminator/s is/are controlled by remote control input on M4

R2 (for M2) e **R3** (for M3), cut the terminal/s when on the respective output terminal block (**M2** and/or **M3**) is/are connected IL100 and/or IL150 only

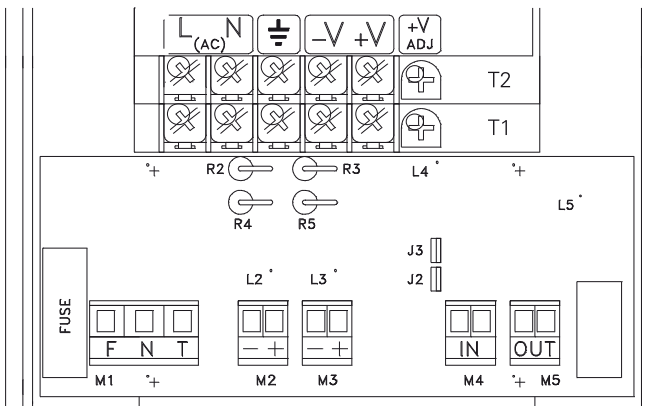
PSBOX35-00: dedicated to n.1 IL100, n. 1 IL150, n.1 IL200 (suitable for max.2 IL100 or max.2 IL150)

PSBOX75-00: dedicated to n.1 IL300 (suitable for max.2 IL200)

in case of pole mounting of the PSBOX35-00 use the optional support: ACBOX35-PM

in case of pole mounting of the PSBOX75-00 use the optional support: ACBOX75-PM

PSBOX75-TW: connections



M1 88÷264 Vac mains IN

M2 12Vdc Output for illuminator 1

M3 12Vdc Output for illuminator 2

M4 Input: NO/NC* remote control for illuminator switch on/off

M5 Output: NO/NC* switching signal from automatic switch (twilight switch) or remote control input on M4

T1 threshold for illumination intensity adjustment, illuminator 1

T2 threshold for illumination intensity adjustment, illuminator 2

* (NC=on, NO=off)

L2, ON indicates a presence of the power supply on **M2** (ILL.1)

L3, ON indicates a presence of the power supply on **M3** (ILL.2)

L4, ON indicates a presence of remote control input on **M4** (IN)

L5, ON indicates a presence of switching signal on **M5** (OUT)

J2 (for M2) and **J3** (for M3), normally inserted; remove when switch ON/OFF of the illuminators is controlled by remote control input on M4

PSBOX75-TW: dedicated to n.1 IL400 (constituted with 2x IL300 side-by side illuminators)

in case of pole mounting use the optional support : ACBOX75-PM

ILLUMINATORS TECHNICAL DATA

Wave lenght

Illumination angle/range (up to)*

IL030 050

IL030 030

IL100 048

IL100 026

IL100 011

Twilight switch

Power supply

LED service life

Operating temperature

Connecting cable

Finishing/colour

Dimensions (w x h x l) mm

Weight

Protection rate

LED safety class

IL030	IL100
850nm	
50° / 15m (a)-20m (b)	
30° / 20m (a)-30m (b)	
	48° / 30m (a)-45m (b)
	26° / 45m (a)-65m (b)
	11° / 65m (a)-90m (b)
automatic	automatic, with adjustable ON/OFF threshold (night/day)
12Vdc-350mA	12Vdc-1A
reverse polarity protected. In case of wrong connection RED LED indicator will flash	
>50.000 rated hours	
-40°C ÷ +100°C	-40°C ÷ +125°C
3m, CEI 20-22/II sheath	
anodized / black	
71 x 59 x 15,5	104 x 75 x 64,5
300 gr	900 gr
IP66	
1M (EN 60825-1, fourth edition) - Exempt Group (EN 62471)	

* The indicated ranges must be considered as general references, related to cameras with the following characteristics and with 1/50s shutter speed:

(a) CCD B/N 1/3" ExViewHad, 0.03 Lux (F1.2), 5-50mm/F1.3 manual varifocal lens

(b) CCD Day&Night 1/3" SuperHad, 0.01 Lux (F1.2), 5-50mm/F1.3 manual varifocal lens

For medium performance cameras reduce distance by at least 30%. For low performance cameras reduce distance by at least 50%.

OPTIONAL ACCESSORIES

Wall bracket

Support for two illuminators

Pole mounting support

Switching

Switching complete with box

Pre-wired PSU (IP65)

ILWBS100-00	
ILWBS100-TS (for ILWBS100-00)	
ILWBS100-PM (for ILWBS100-00)	
PSRS15-12	PSRS25-12
	ACBOX3512
	PSBOX35-00

ILLUMINATORS TECHNICAL DATA

Wave length

Illumination angle/range (up to)*

IL150 130

IL150 045

IL150 025

IL150 018

IL150 011

IL200 130

IL200 045

IL200 025

IL200 018

IL200 011

Twilight switch

Power supply

LED service life

Operating temperature

Connecting cable

Finishing/colour

Dimensions (w x h x l) mm

Weight

Protection rate

LED safety class

IL150	IL200
850nm	
H 130°xV 90° / 18m (a) - 25m (b)	
45° / 55m (a) - 75m (b)	
25° / 75m (a) - 105m (b)	
18° / 90m (a) - 125m (b)	
11° / 110m (a) - 155m (b)	
H 130°xV 90° / 25m (a) - 35m (b)	
45° / 75m (a) - 105m (b)	
25° / 105m (a) - 145m (b)	
18° / 125m (a) - 175m (b)	
11° / 150m (a)-210m (b)	
automatic, with adjustable ON/OFF threshold (night/day)	
12Vdc-1A	12Vdc-2A
Reverse polarity protected. In case of wrong connection a RED LED indicator will flash.	
>50.000 rated hours	
-40°C ÷ +100°C	
3m, CEI 20-22/II sheath	
anodized / black	
104 x 75 x 64,5	104 x 104 x 64,5
104 x 75 x 75,5	104 x 104 x 75,5
900 gr	1.100 gr
IP66	
1M (EN 60825-1, fourth edition) - Exempt Group (EN 62471)	

* The indicated ranges must be considered as general references, related to cameras with the following characteristics and with 1/50s shutter speed:

(a) CCD B/N 1/3" ExViewHad, 0.03 Lux (F1.2), 5-50mm/F1.3 manual varifocal lens

(b) CCD Day&Night 1/3" SuperHad, 0.01 Lux (F1.2), 5-50mm/F1.3 manual varifocal lens

For medium performance cameras reduce distance by at least 30%. For low performance cameras reduce distance by at least 50%.

OPTIONAL ACCESSORIES

Wall bracket

Support for two illuminators

Pole mounting support

Switching

Switching complete with box

Pre-wired PSU (IP65)

ILWBS100-00	
ILWBS100-TS (for ILWBS100-00)	
ILWBS100-PM (for ILWBS100-00)	
PSRS15-12	PSRS25-12
ACBOX3512	
PSBOX35-00	

ILLUMINATORS TECHNICAL DATA

Wave lenght

Illumination angle/range (up to)*

IL300 045

IL300 025

IL300 018

IL300 011

IL400 045

IL400 025

IL400 018

IL400 011

Twilight switch

Power supply

LED service life

Operating temperature

Connecting cable

Finishing/colour

Dimensions (w x h x l) mm

11° illumination angle

Weight

Protection rate

LED safety class

IL300	IL400
850nm	
45° / 110m (a) - 155m (b)	
25° / 150m (a) - 210m (b)	
18° / 180m (a) - 250m (b)	
11° / 220m (a) - 310m (b)	
45° / 155m (a) - 215m (b)	
25° / 210m (a) - 295m (b)	
18° / 250m (a) - 350m (b)	
11° / 310m (a) - 430m (b)	
automatic, with adjustable ON/OFF threshold (night/day)	
12Vdc-1A	12Vdc-2A
reverse polarity protected. In case of wrong connection a RED LED indicator will flash.	
>50.000 rated hours	
-40°C ÷ +100°C	
3m, CEI 20-22/II sheath	
anodized / black	
104 x 180 x 64,5	2x IL300
104 x 180 x 75,5	2x IL300
2.200 gr	2x 2.200 gr
IP66	
1M (EN 60825-1, fourth edition) - Exempt Group (EN 62471)	

* The indicated ranges must be considered as general references, related to cameras with the following characteristics and with 1/50s shutter speed:

(a)CCD B/N 1/3" ExViewHad, 0.03 Lux (F1.2), 5-50mm/F1.3 manual varifocal lens

(b)CCD Day&Night 1/3" SuperHad, 0.01 Lux (F1.2), 5-50mm/F1.3 manual varifocal lens

For medium performance cameras reduce distance by at least 30%. For low performance cameras reduce distance by at least 50%.

OPTIONAL ACCESSORIES

Wall bracket

Pole mounting support

Switching

Pre-wired PSU (IP65)

ILWBE280-00	
ACWBE280-PM (per staffa ILWBE280-00)	
PSRS75-12	2x PSRS75-12
PSBOX75-00	PSBOX75-TW

POWER SUPPLY TECHNICAL DATA

SWITCHING

AC INPUT (voltage range)
 OUTPUT
 OPERATING TEMPERATURE
 CONNECTIONS
 ADJUSTABLE POWER
 DIMENSIONS (WxHxL) mm
 SAFETY STANDARDS
 EMC STANDARDS

VERSION WITH BOX (IP65)

ILLUMINATOR

PSRS15-12	PSRS25-12	PSRS35-12	PSRS75-12
88-264 Vac			
12Vdc-1.3A	12Vdc-2.1A	12Vdc-3A	12Vdc-6A
-20 °C ÷ + 70 °C			
terminal			
with threshold, for IL150, IL200, IL300, IL400			
51 x 28 x 62,5	51 x 28 x 78	82 x 35 x 99	98 x 38 x 129
UL60950-1, TUV EN 60950-1 approved			
EN55022 class B / EN 61000-3-2,3 / EN 61000-4-2,3,4,5,6,8,11 /			
ENV50204 / EN61000-6-2 (EN50082-2) (35-150W)			
ACBOX3512 (pag. 4)			
IL030	IL100 IL150	IL200	IL300

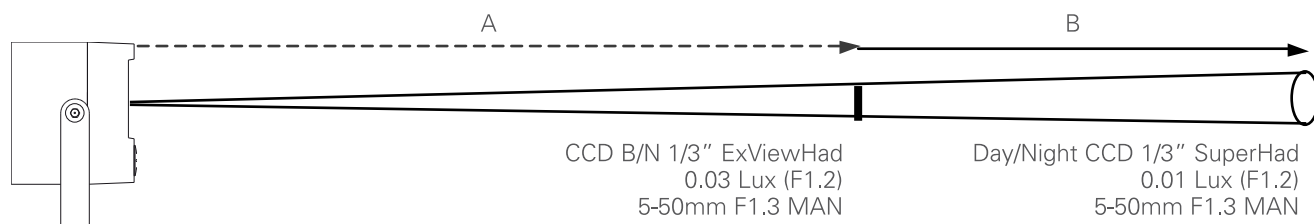
PRE-WIRED PSU (ALLUMINIUM DIE-CASTING BOX) IP65

AC INPUT (voltage range)
 OUTPUT
 OPERATING TEMPERATURE
 CONNECTIONS
 TELEMETRY INPUT*
 CABLE GLANDS
 ADJUSTABLE POWER
 DIMENSIONS (WxHxL) mm
 ILLUMINATOR

PSBOX35-00	PSBOX75-00	PSBOX75-TW
88-264 Vac		
12Vdc-3A	12Vdc-6A	(2x) 12Vdc-6A
-20 °C ÷ + 70 °C		
terminal block for all cable connections		
yes		
1x PG11+4x PG7		
with threshold for IL150, IL200, IL300, IL400		
135 x 75 x 200	135 x 90 x 270	
IL100	IL300	IL400
IL150		
IL200		

* Pre-wired power packs can make it possible to activate the steering circuit, by switching the illuminator on/off, through a remote control. Both in case of automatic switch on, through the illuminator photocell, and of remote steering, an OUTPUT is always available (N.O. contact). Otherwise, it is possible to be supplied with an harnessed power supply, which comes in a sealed housing, with pre-mounted cable glands.

LIGHT RANGE (850nm)



MODEL	ILLUMINATION ANGLE	A up to (m)	B up to (m)
INFRALUX030			
IL030 050	50°	15	20
IL030 030	30°	20	30
INFRALUX100			
IL100 048	48°	30	45
IL100 026	26°	45	65
IL100 011	11°	65	90
INFRALUX150			
IL150 130	130° (H)x90° (V)	18	25
IL150 045	45°	55	75
IL150 025	25°	75	105
IL150 018	18°	90	125
IL150 011 *	11°	110	155
INFRALUX200			
IL200 130	130° (H)x90° (V)	25	35
IL200 045	45°	75	105
IL200 025	25°	105	145
IL200 018	18°	125	175
IL200 011 *	11°	150	210
INFRALUX300			
IL300 045	45°	110	155
IL300 025	25°	150	210
IL300 018	18°	180	250
IL300 011 *	11°	220	310
INFRALUX400			
IL400 045	45°	115	215
IL400 025	25°	210	295
IL400 018	18°	250	350
IL400 011 *	11°	310	430

*11° illumination angle available on request only

The indicated ranges must be considered as general references, referred to the specified cameras with 1/50s shutter speed. For medium performance cameras reduce distance by at least 30%. For low performance cameras reduce distance by at least 50%. In case of Day&Night cameras: versions with mechanic filters are indicated.

Note: 940nm could result in 50% distance decrease, compared to 850nm wave length; this percentage is only indicative and strictly related to CCD's Quantum Efficiency.

CCD 1/3" typical lenses: Focal Length (H angle)

4mm (62°) ; 6mm (43,5°) ; 8mm (35,6°) ; 12mm (22,1°)

2.8-12mm (98,2°-23,8°) ; 3.5-10.5mm (81,6°-27,2°) ; 5-50mm (51,8°-5,6°) ; 10-25mm (26,9°-11,3°)

NOTE

STANDARD APPLICATIONS

InfraLUX 030 (4,2W)

Particularly suitable, thanks to its small dimensions, for all civil application (Banks, Museum, and Art Galleries, Schools, Hospitals, Doorway & Entrances), Car Parks, Landfills, and so on.

InfraLUX 100 (12W)

Particularly suitable, thanks to its small dimensions, for all civil application (Banks, Museum, and Art Galleries, Schools, Hospitals, Doorway & Entrances, and so on..), Graffiti, High End Residential, Car Park, Monitoring of Traffic-Restricted Areas, Number Plate Reader, Industrial Park, Landfills.

InfraLUX 150 (12W)

Particularly suitable for: Indoor Illumination, Graffiti, Military Base, Perimetric Surveillance Systems, City Center, Car Park, Monitoring of Traffic-Restricted Areas, Number Plate Reader, Barrier Gate, Industrial Park, and so on.

InfraLUX 200 (24W)

Particularly suitable for: Wide Indoor Illumination, Dome Camera System, Military Base, Perimetric Surveillance Systems, Airports, City Center, Car Park, Barrier Gate, Industrial Park, Power Plants, and so on.

InfraLUX 300 (48W)

Particularly suitable for: Dome Camera System, Military Base, Perimetric Surveillance Systems, Airports, Prison, Water Reservoirs, Urban Video Surveillance System, Industrial Park, Power Plants, and so on.

InfraLUX 400 (2x 48W)

Particularly suitable for: Perimeter Surveillance Systems, Dome Camera Systems (Illumination for Presets, Major Squares, Major Parking Lots), Long Routes like Motorways, Railways, Tunnels, Stadiums, Harbours, Airports, Coast Guard, Police Surveillance and Urban Video Surveillance System.

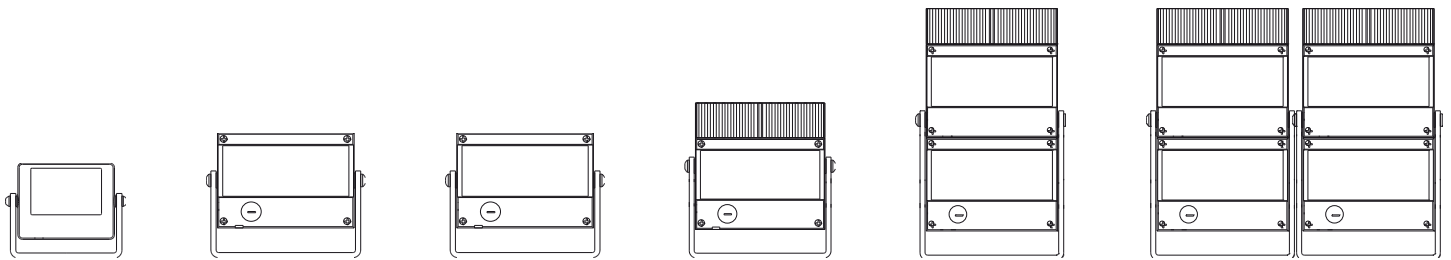
HIGHPOWER IR-LED ILLUMINATORS

Thinking of the new INFRALUX illuminators as “standard” illuminators would be extremely reductive. This new line comes from an extensive research and is based on the implementation of technologies usually applied exclusively to High-Tech sectors. SERINN’s engineers were therefore asked to propose new and innovative solutions whose results have gone further beyond the already ambitious goals that were set in the first place.

The mechanics behind it was designed specifically in order to achieve an higher heat dissipation, therefore respecting MTBF and low consumption of the applied sources. The idea of the front panel comes from a project that uses special Techno-polymers applied for selective lighting applications. Special additives are also used in order to provide a protection against corrosion and weather conditions.

In designing its new INFRALUX line, SERINN particularly focused on the electronic side for controlling and steering these brand new semiconductors (specific IR-LED for CCTV applications) which guarantee top performances in terms of emissions’ quality. These top performances (to be found usually in the Automotive business only and at extremely great costs) make it possible to offer the most suitable product for each and every CCTV need.

INFRALUX: state-of-the-art IR illuminating technology for CCTV Systems



WARNINGS



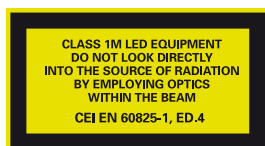
HOW TO DISPOSE OF YOUR OLD PRODUCT

Your product is designed and manufactured with high quality materials and components, which can be recycled and reused. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC. Please get information yourself about the local separate collection system for electrical and electronic products. Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.



CE MARKING

The company SERINN, as manufacturer of the INFRALUX SERIES, certifies that all products have met all applicable requirements.



LED AND LASER CLASSIFICATION SYSTEM

The company SERINN, as manufacturer of the INFRALUX SERIES, certifies that IR illuminators comply with the following international standard: LASER/LED EN 60825-1 fourth edition.

LED Safety Class: 1M

EXEMPT GROUP (EN62471)

