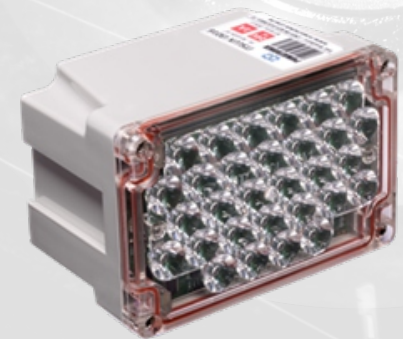


# ITSLUX

HIGH POWER, LOW CONSUMPTION AND INFRARED EMISSION

# | Installation

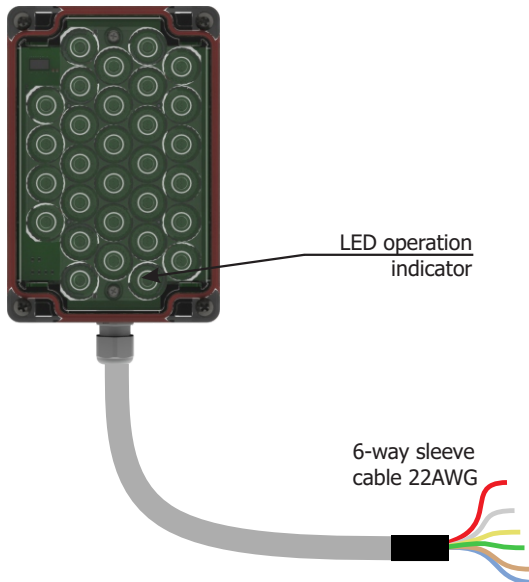


## ITSLUX ILLUMINATOR MODELS

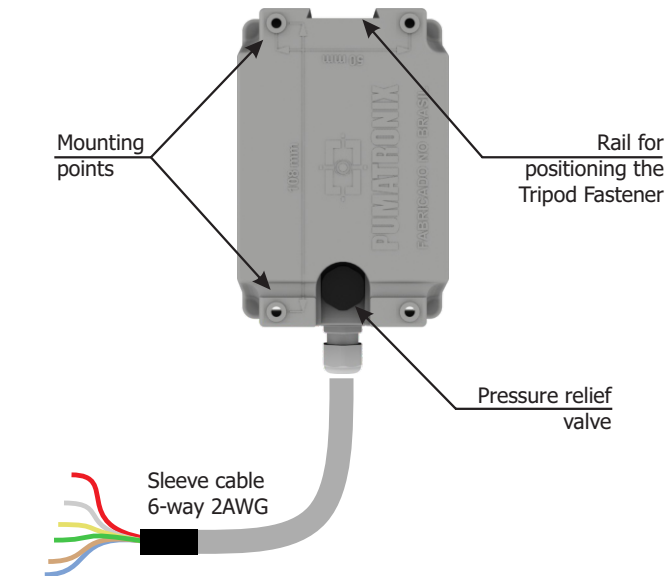


| MODEL                         | I1516        | I3016    | I3022   | I3090  | I6022   |
|-------------------------------|--------------|----------|---------|--------|---------|
| Emission angle                | 16°          | 16°      | 22°     | 90°    | 22°     |
| Recommended Distance (meters) | 15 a 21m     | 15 a 30m | 4 a 15m | 3 a 7m | 4 a 21m |
| Supply Voltage                | 12 ou 24 Vdc |          |         |        |         |
| Consumption                   | 1w           |          |         |        |         |

## FRONT INTERFACE VIEW



## REAR INTERFACE VIEW



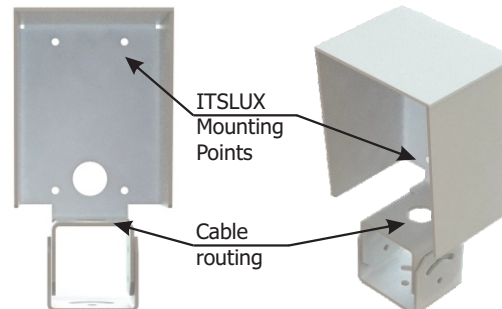
**Pressure valve: keep the pressure equalizer device unobstructed at the ITSLUX installation site.**



**It is recommended that the ITSLUX illuminator be installed in conjunction with the ITSLUX Bracket to protect the housing from vandalism and direct sunlight. In this way, the equipment's service life can be extended well beyond the warranty period.**

## MOUNTING ON THE ITSLUX BRACKET

1. Slide the cable and cable gland into the bottom of the ITSLUX Bracket.
2. Fix the ITSLUX internally to the bracket in the existing holes using 4 stainless steel pan head self-tapping screws 4.8x13mm.

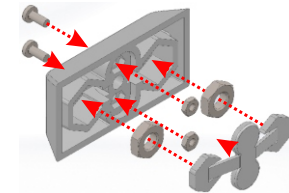


## MOUNTING WITH THE TRIPOD MOUNTAIN MECHANISM

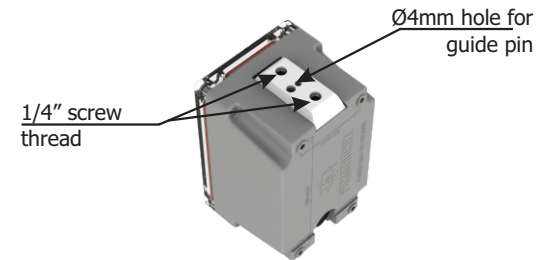


**ITSLUX is designed to be installed outdoors, however it is recommended to protect it using the ITSLUX Bracket, which increases the product's durability.**

3. Reassemble the Mounting Mechanism following the sequence shown in the image, if it becomes detached from the ITSLUX housing:



4. Insert the Fastener into the rail located at the top of the illuminator housing, keeping the screws loose or open enough for the assembly to slide onto the rail:

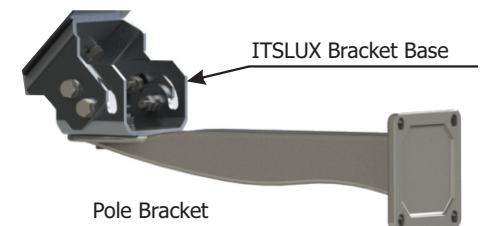


5. Attach the Mounting Mechanism assembly to the illuminator by screwing in the screws simultaneously, ensuring that it is perpendicular to the installation surface.

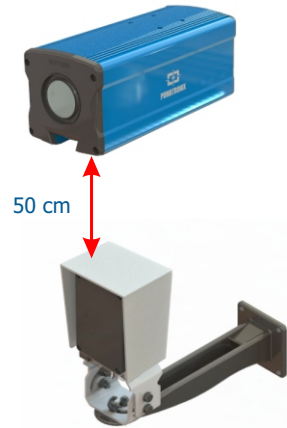
6. Attach the illuminator to the desired surface using two 1/4" diameter screws and the guide pin.

## ITSLUX POSITIONING

7. Attach the Pole Bracket to the base of the ITSLUX Bracket with the illuminator fixed, to install the equipment on poles or gantries.



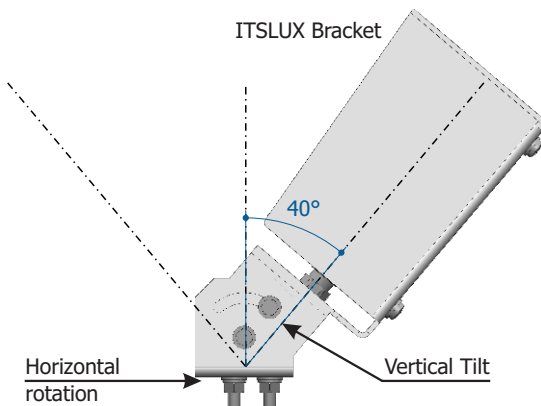
8. When possible, select the same pole or gantry structure on which the ITSCAM device is mounted in order to install the ITSLUX using the Pole Bracket, observing the minimum distance between the equipment:



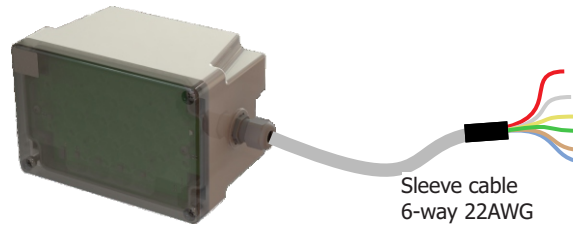
9. Position the illuminator in such a way as to avoid the flux of light being obscured by objects such as trees or structures on the site.

10. Direct the ITSLUX to the same focal point as the ITSCAM device, rotating it horizontally by slightly loosening the screws at the base of the ITSLUX Bracket.

11. Position the ITSLUX at the same focal point as the ITSCAM device, tilting it vertically by slightly loosening the screws at the base of the ITSLUX Bracket, observing the maximum possible angle.



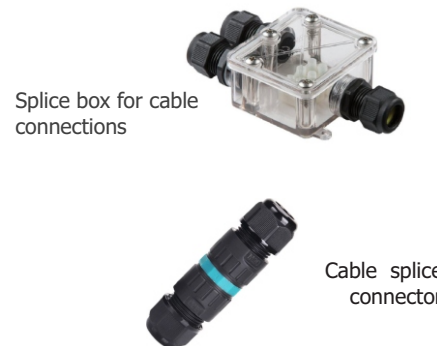
## SIGNAL CONNECTIONS



| TERMINAL | SIGNAL    |
|----------|-----------|
| Red      | V+        |
| Grey     | GND       |
| Yellow   | RS-232_Tx |
| Green    | RS-232_Rx |
| Brown    | IN+       |
| Blue     | IN-       |



**The electrical and signal connections made in the ITSLUX bundle must be protected in a terminal box or similar structure to prevent oxidation of the connections and unwanted infiltration of liquids into the bundle and consequently into the ITSLUX. Examples of structures:**

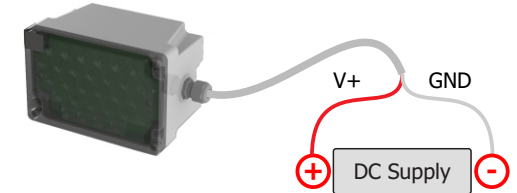


**Opening the ITSLUX, the cable gland and exposing the equipment to moisture through the unprotected end of the cable will result in the loss of the product warranty.**

## POWER SUPPLY

12. Use a 12Vdc or 24Vdc power supply.

13. Make the power connections using the supplied bundle and considering the respective colors of the V+ and GND signals:



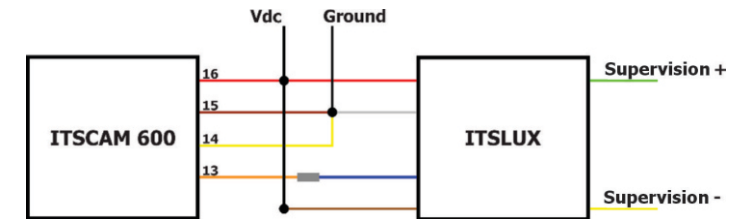
**This equipment must be powered by a direct current (DC) source with a voltage of 12 or 24 Vdc. Do not connect any of the inputs directly to the power grid (AC)!**

## ITSCAM CONNECTION DIAGRAMS

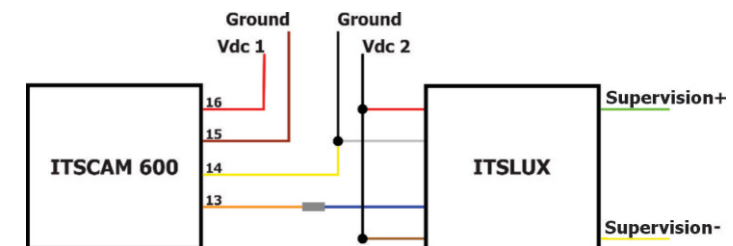
\* The RS-232\_Tx (yellow) and RS-232\_Rx (green) signal connections of the ITSLUX are used to trigger the flash via the RS-232 serial interface, and make it possible to monitor the status of the equipment at each trigger. See the ITSLUX manuals for more information on operation.

### ITSCAM 600 CONNECTIONS

Connection using only one power supply:

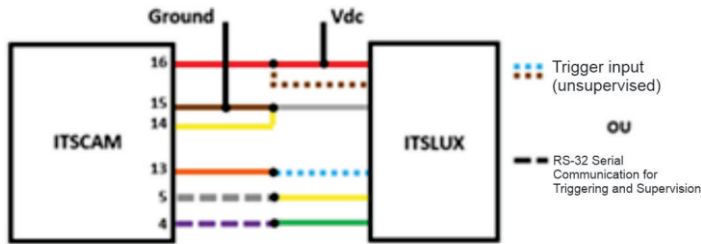


Connection using independent power supplies:

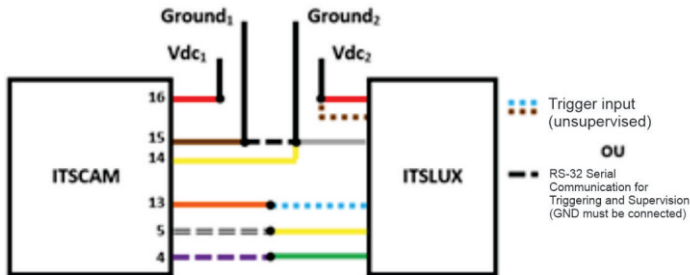


## ITSCAM 400 CONNECTIONS

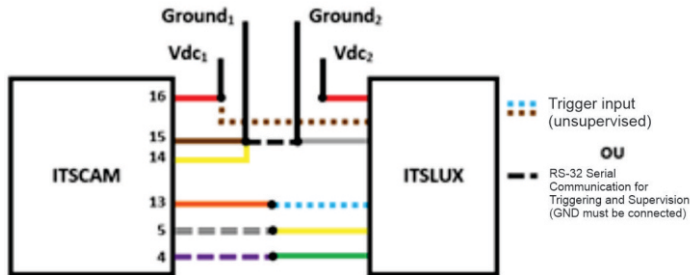
Connection using only one power supply:



Connection using independent power supplies:



Option to connect using independent power supplies:



## INSTALLING ITSLUX WITH ITSCAM 600

**14.** Disconnect/de-energize the power supply for the ITSCAM 600 and the illuminator.

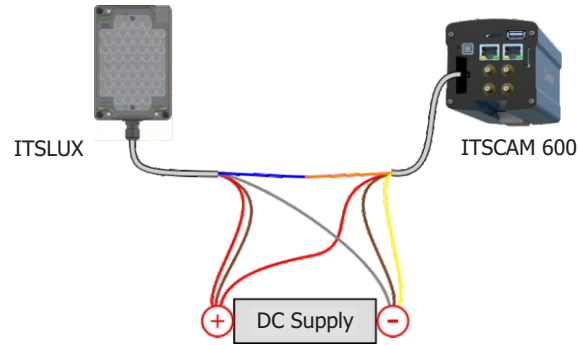
**15.** Connect ITSCAM 600 **orange** wire (IO1+) on the **blue** Negative wire (IN-) of the ITSLUX bundle.

**16.** Connect ITSCAM 600 **yellow** wire (IO1-) on the power supply Negative (GND).

**17.** Connect ITSLUX bundle **brown** wire (IN+) on the Positive of the power supply, using the same supply that powers the ITSCAM 600 or a supply that has a common ground with the ITSCAM 600 power supply.

**18.** Connect ITSLUX bundle **red** wire (V+) on the Positive of the power supply.

**19.** Connect ITSLUX bundle **gray** wire (GND) on the Negative (GND) of the power supply.



**20.** Protect connections with splice connectors or similar structures.

**21.** Secure all routes of the DC power bundle.

**22.** Isolate the unused paths of the Microfit connector bundle and the ITSCAM 600 bundle.

**23.** Check via the web interface that the positioning of the illuminator correctly illuminates the focal point of the generated images. Access the ITSCAM 600 Integration Manual for more information.

## INSTALLING ITSLUX WITH ITSCAM 400

**24.** Disconnect/de-energize the power supply for the ITSCAM 400 and the illuminator.

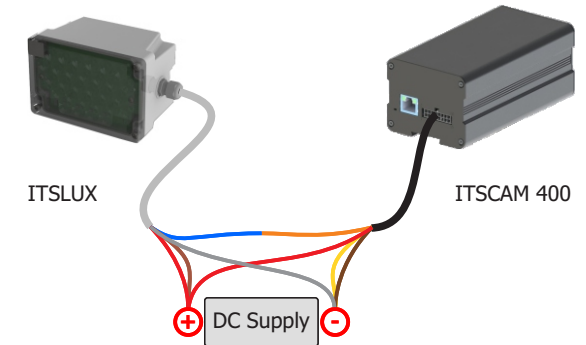
**25.** Connect ITSCAM 400 **orange** wire (OUT1+) on the Negative ITSLUX bundle **blue** wire (IN-).

**26.** Connect ITSCAM 400 **yellow** wire (OUT1-) on the Negative (GND) of the power supply.

**27.** Connect ITSLUX bundle **brown** wire (IN+) on the Positive of the power supply, using the same supply that powers the ITSCAM 400 or a supply that has a common ground with the ITSCAM 600 power supply.

**28.** Connect ITSLUX bundle **red** wire (V+) on the Positive of the power supply.

**29.** Connect ITSLUX bundle **gray** wire (GND) on the Negative (GND) of the power supply.



**30.** Protect connections with splice connectors or similar structures.

**31.** Secure all routes of the DC power bundle.

**32.** Isolate the unused paths of the Microfit connector bundle and the ITSCAM 400 bundle.

**33.** Check via the web interface that the positioning of the illuminator correctly illuminates the focal point of the generated images. Access the ITSCAM 400 Integration Manual for more information.



## CARE AND MAINTENANCE

- Periodically check the situation of the installations as a preventive maintenance measure
- Check that the illuminator is aligned in the direction of the vehicle's capture point, correcting the alignment where necessary;
- Periodically inspect the state of preservation of the polycarbonate front cover, as fragments can fall off due to the movement of vehicles on the track or vandalism, which can damage the quality of the lighting;
- Remove excess dirt adhered to the surface when necessary.

## WARRANTY

Pumatronix guarantees the product against any defect in material or manufacturing process for a period of 1 year from the date of issue of the invoice, provided that, at the discretion of its authorized technicians, it is found to be defective under normal conditions of use.

The replacement of defective parts and the execution of services resulting from this Warranty will only be carried out at Pumatronix Authorized Technical Assistance or a third party expressly indicated by Pumatronix, where the product must be delivered for repair.

This Warranty will only be valid if the product is accompanied by a Maintenance Form that has been duly filled in and has not been erased and is accompanied by an Invoice.

## SITUATIONS IN WHICH THE PRODUCT LOSES ITS WARRANTY

- 1) Using software/hardware not compatible with the specifications in the Manual;
- 2) Connecting the product to the power grid outside the standards set out in the product manual and installations with excessive voltage variation;
- 3) Infiltration of liquids from opening/closing the product;
- 4) Damage caused by natural agents (electric shock, flooding, salt spray, excessive exposure to climatic variations, among other factors) or excessive exposure to heat (beyond the limits established in the Manual);
- 5) Using the product in environments subject to corrosive gases, excessive humidity and/or dust;
- 6) Showing signs of tampering with security sealst;
- 7) Showing signs of opening or modification by the Customer in places of the product not authorized by Pumatronix;
- 8) Damage caused by accidents/falls/vandalism;
- 9) Displaying a tampered and/or removed serial number;
- 10) Damage resulting from the Customer's transportation and packaging of the product in conditions incompatible with it;
- 11) Misuse and not in accordance with the instruction manual.

## PRIVACY POLICY

In compliance with the General Data Protection Law (LGPD) - Law No. 13709, dated August 14, 2018, this product has programmable functions for capturing and processing images that may infringe the LGPD when used in conjunction with other equipment to capture personal data.

Pumatronix is not responsible for the nature, use and treatment of the images captured, and control of the information and ways of operating the product are the sole decision of the user or purchaser of the product.



| Changes History |          |  |
|-----------------|----------|--|
| Date            | Revision | Updated content  |
| 06/30/2022      | 1.0      | Initial issue referring to Revision 2.0 of the ITSLUX Product Manual |
| 12/18/2023      | 1.1      | Update of templates and general document layout                      |
| 01/22/2025      | 1.1.1    | Updated the Distance for model I3016                                 |

**\* For more information access the product manual at [www.pumatronix.com.br](http://www.pumatronix.com.br).**

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Movimento em Foco.

