

# LPN-LUX

(Replaces TWN-LUX.)

Light Intensity (LUX)  
Sensor and 2 Wire  
Output Transmitter.

## Light Intensity Transmitter.

### Description.

The LPN-LUX incorporates an integrated light sensor within an industrial IP66 rated sealed enclosure and is especially designed for high precision linear applications. The sensor has a flat glass window with a built in colour correction filter, giving an approximation to the spectral response in the human eye.



### Features.

- Various Lux Ranges Available.
- 2 wire 4~20mA Output (Loop Powered).
- High Accuracy.
- IP66 Enclosure.
- Low Cost.
- Easy to Install.
- Reverse Polarity Protection.

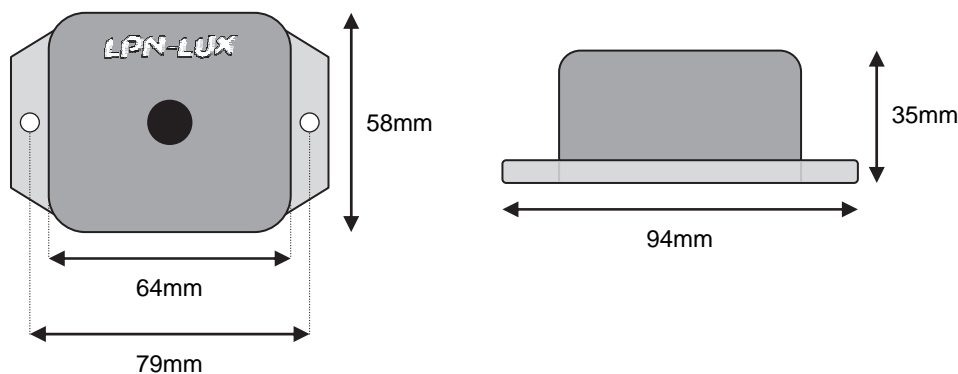
### Ordering Information.

- LPN-LUX - Standard Calibration: 0~1000lux Nominal.
- Special Calibration Ranges available: 0~100, 0~500, 0~5000, 0~10000lux.

### Specifications.

Input		0~1000lux - Standard Calibration.
Output	Current	2 wire 4~20mA (Loop Powered).
	Load Resistance	600Ω @ 24Vdc.
Power Supply		8~33Vdc (Loop Powered).
Temperature Coefficient		0.15% per 1°C.
Operating Temperature		0~60C (Storage Temp. -20~80C).
Operating Humidity		5~85% RH Max. Non-Condensing.
Analogue/Digital Converter		12 Bit.
EMC Compliances		Emissions EN 55022-A. Immunity EN 50082-1.
Safety Compliances		EN 60950.
Cable Length		2m.
Enclosure	Type	Polycarbonate.
	Ratings	IP66 rated, RoHS Compliant, UL 94 HB Flammability Rating.
	Dimensions	L=64mm, W=58mm, H=35mm (Length including mounting flanges = 94mm).

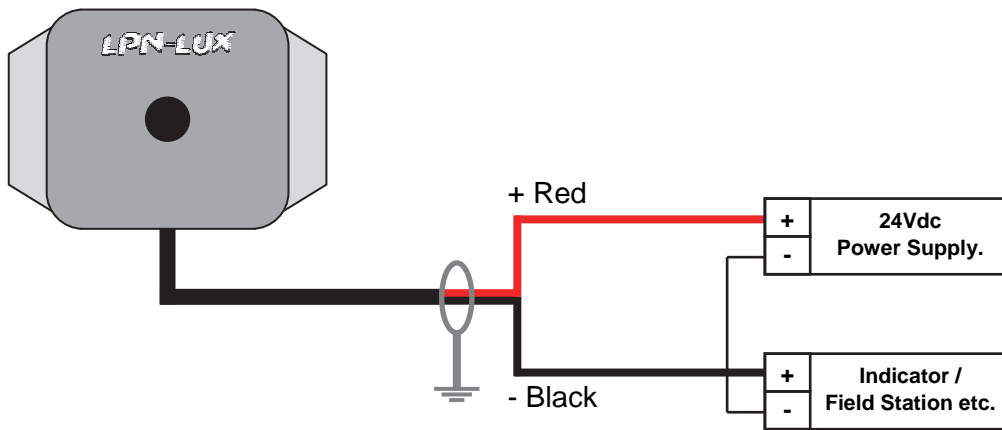
### LPN-LUX Dimensions.



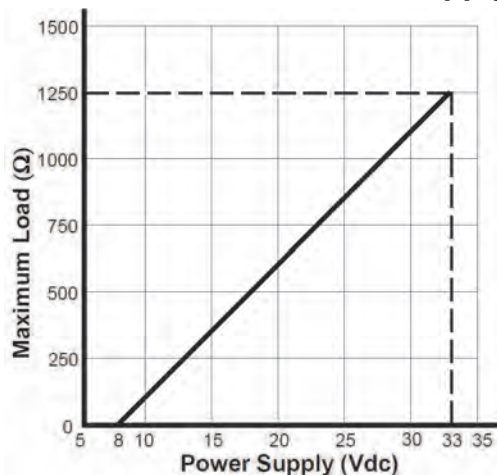
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**Warning: These products are not designed for use in, and should not be used for patient connected applications. In any critical installation an independent fail-safe back-up system must always be implemented.**

## Connection Diagram - 4~20mA Loop Powered.



## Maximum Load Vs Power Supply.



## The Proper Installation & Maintenance of LPN-LUX.

### MOUNTING.

- (1) Mount in a clean environment away from power control equipment. Be mindful of positioning the light sensor; positioned in the centre of the enclosure, so that the desired level of illumination reaches the sensor. **Do Not mount the sensor in direct light or sunlight** - measure reflected light. e.g. mount on the ceiling, facing the floor, to measure the light level of the room.
- (2) Do not subject to vibration or excess temperature or humidity variations.

### WIRING.

- (1) All cables should be good quality overall screened INSTRUMENTATION CABLE with the screen earthed at one end only.
- (2) Signal cables should be laid a minimum distance of 300mm from any power cables.
- (3) It is recommended that you use power supplies with ungrounded outputs and that you do not ground current loops.
- (4) Lightning arrestors should be used when there is a danger from this source.
- (5) To ensure IP66 rating is maintained, make sure all closures are properly sealed; including the wire gland.

### COMMISSIONING.

- (1) Once all the above conditions have been carried out and the wiring checked, apply power to the LPN-LUX and allow five minutes for it to stabilise.

### MAINTENANCE.

- (1) For cleaning the LPN-LUX sensor, use a wet cloth and ensure all traces of dirt are removed. Do not use any cleaning agents. Do it regularly - at least once every 6 months.