

## iNODE 410

iNODE 410 controls LED driver in the luminaire and connects wirelessly to the intelligent iLUMNET network. iNODE has MESH capable SRD radio operating at 863-870 MHz frequency. Radio is connected to the external antenna. iNODE module is designed to be integrated inside the luminaire chassis.

iNODE 410 is used with luminaires when there is auxiliary supply voltage available, for example from LED driver. Naturally iNODE 410 can be used also with DC systems, like battery powered luminaires.

iNODE 410 supports PWM as LED driver control interface.

### Key features

- SRD Radio communication in iLumNet network
- Luminaire LED driver control with PWM interface
- Compensation of LED depreciation
- iLumNet sensor bus and interface to measure external NTC resistor
- External voltage level measurement

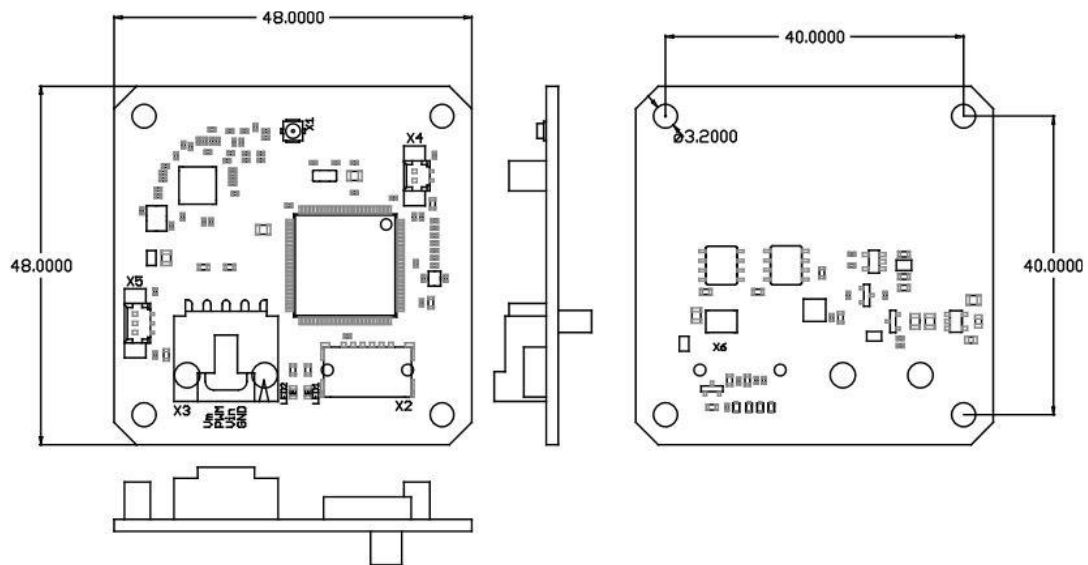
### Technical specifications

Connections	<b>Antenna connector</b> (U.FL/IPEX) RF connection for antenna <b>System connector</b> (Molex 15-91-2045) DC supply voltage input for iNODE PWM control output for LED driver Voltage level measurement input 0-3V <b>Sensor bus</b> iLumNet sensor bus to connect sensor module. <b>Temperature sensor (NTC)</b> Connection to external 10k $\Omega$ NTC resistor (for example Murata NCP18XH103J03RB)
Supply voltage	5 - 12 V <sub>DC</sub> (absolute maximum level 16 V <sub>DC</sub> )
Power consumption	Stand-by: 30mW (@5V <sub>DC</sub> ) Maximum consumption is depending on consumption of connected sensors
Electrical insulation	No additional electrical isolations
Operating temperature	-40 ... +70 °C
Chassis	No chassis, PWB card is assembled inside the luminaire. Chassis is expected to provide protection according to targeted IP rating.
Dimensions (w x l x h mm)	48 x 48 x 12,5

Subject to change without prior notice.

Mounting	Fastened with screws into the internal structures of the luminaire.
Radio	SRD 863 – 870 MHz, std. ETSI EN300 220-1 32 channels MESH 6LoWPAN network capable TX output power 14 dBm EIRP (max). Max gain of used antenna is 2,1dBi. Sensitivity -110 dBm. Transceiver category 2
PWM control interface	Open collector type control output (different assembly options). PWM frequency 1kHz
Applied standards	EN 300 220-1, -2 v2.4.1 EN 301 489-1 v1.9.2 EN 301 489-3 v1.6.1

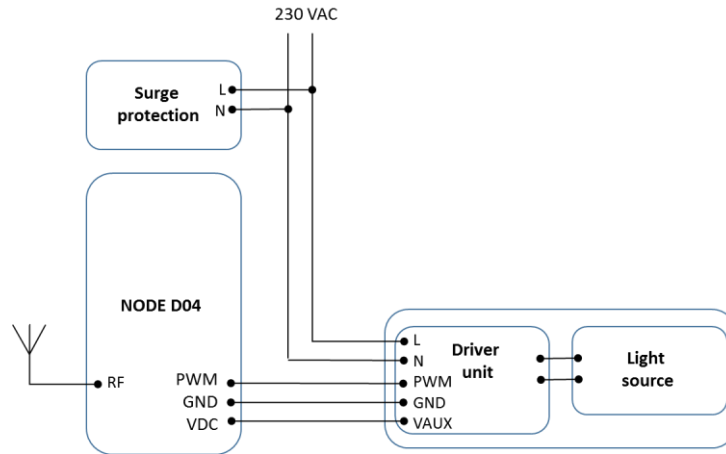
## Mechanical dimensions



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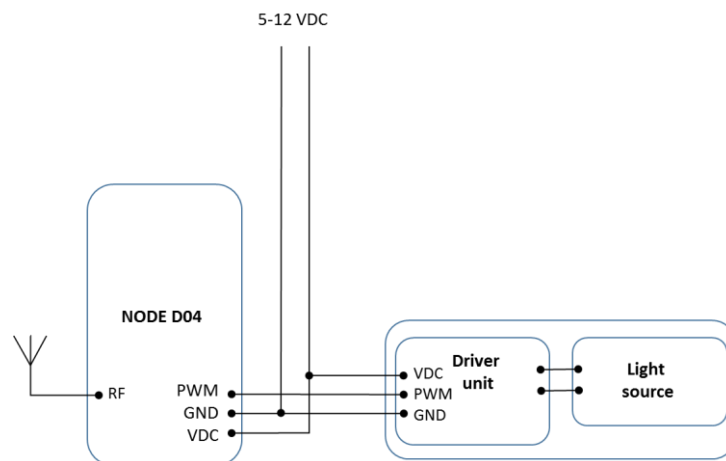
## Application examples

### Luminaire using 230 VAC supply and auxiliary supply voltage



LED driver with auxiliary supply output expected. Check the leading capability of the auxiliary voltage.

### Luminaire using DC supply voltage



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