

iDC-IOT

intelligent Data Concentrator (Edge Controller)

For efficient control of urban and street lighting

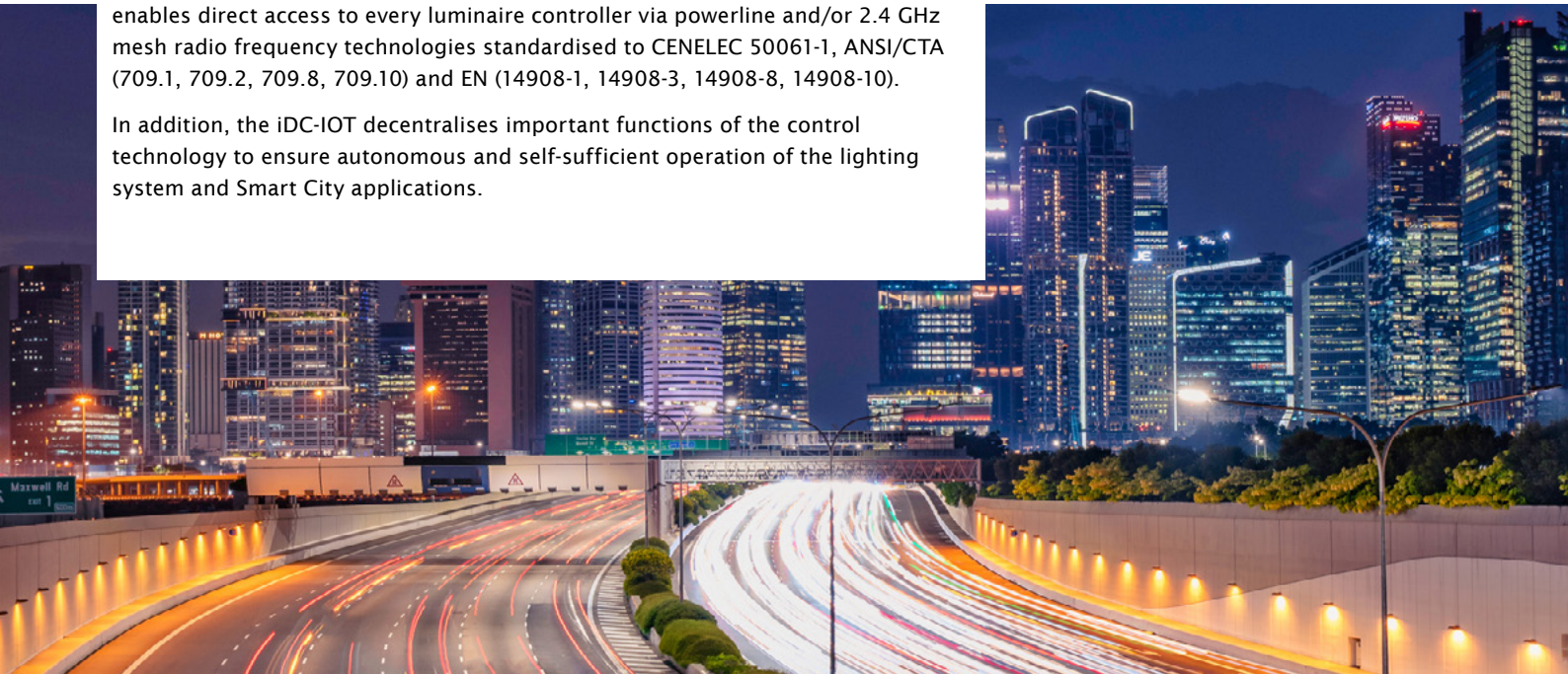
- «All-in-one» most powerful data concentrator of the market
- Powerline (Narrow-, Broadband) and wireless control
- Several versions available for SCADA connectivity
- Persistent control of applications even in offline mode
- Linux operating system



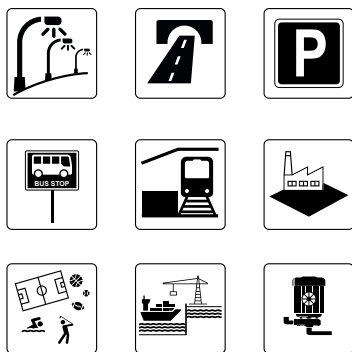
iDC-IOT data concentrator is the intelligent interface between the luminaire controllers in the field and the central management system.

As a major connecting element of the light management system, the iDC-IOT enables direct access to every luminaire controller via powerline and/or 2.4 GHz mesh radio frequency technologies standardised to CENELEC 50061-1, ANSI/CTA (709.1, 709.2, 709.8, 709.10) and EN (14908-1, 14908-3, 14908-8, 14908-10).

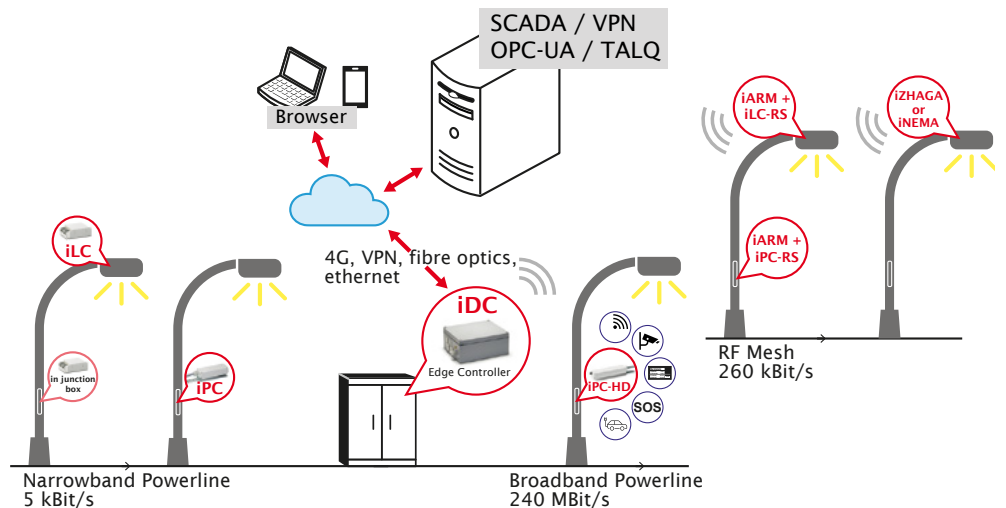
In addition, the iDC-IOT decentralises important functions of the control technology to ensure autonomous and self-sufficient operation of the lighting system and Smart City applications.



Typical application fields

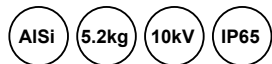
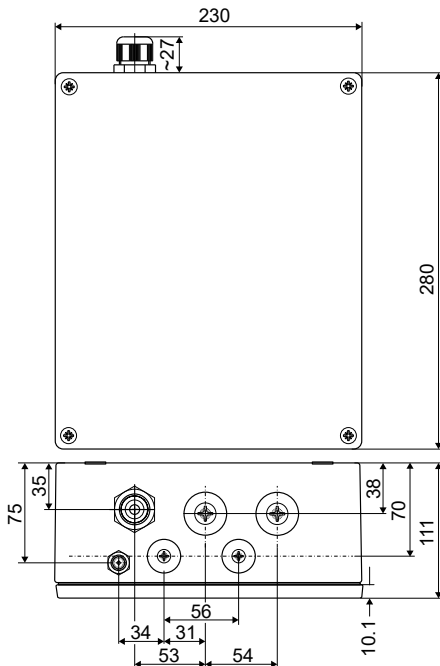


For remote control with central management



Dimensions (mm)

L 280 mm / W 230 mm / H 111 mm



iDC-IOT	
Ref. No.	200036 (IP-NB-IO) / 200037 (R4G-NB-IO)
Mains voltage/frequency	110-230 V AC (± 10%), 50/60 Hz
Power consumption	7-15 W
Communication	protocol TCP/IP MQTT/REST (ANSI/CTA 709.10) to the main computer
Standard compliance	ANSI/CTA 709.1, 709.2, 709.8 - EN 14908-1, 14908-3, 14908-8
Narrowband powerline	acc. to CENELEC 50065-1 primary band (C) 125-140 kHz; secondary band (B) 95-125 kHz single-, bi- or triphase
Broadband powerline	External coupling with Ethernet HD-PLC converter, e.g. iPC-HD acc. to IEEE 1901 (2-28 MHz); HD-PLC driver licence is also required for broadband powerline communication (Ref. No. 200040)
Data transfer	Manager/Subordinate for max. 200 luminaire controllers; repeating with dynamic monitoring of the communication path
Ethernet port	10/100/1000 Base-T, auto-selecting, auto-polarity
Internet protocol	TCP, UDP, http, https, SMTP, POP3, IAP
LonMark® OLC profile	Interoperable, use of mandatory network variables and configuration parameters, repeatable
Digital interfaces (only for NB-IO versions)	2 x 30 V DC (optionally extendable using a cut-off relay for 230 V AC) / 2 relays 230 V AC, 4 A
Operating temperature range	-25 to +60 °C
Storage temperature range	-25 to +85 °C
Protection class	I
Connection	Boreholes for metric screw connections each: M25 x 1.5 mm / M32 x 1.5 mm / M20 x 1.5 mm
Aerial connection	FME male for external aerial

Transmission options

- IP
 - 4G router / VPN
For integration into a mobile network, an additional SIM data card is required (not included in the scope of delivery)
 - Fibre optics Multi- and Single-mode
- All versions with or without digital input/output relays (IO).

For more detailed information please visit our website
www.iciti.de/en/idc-iot-edgecontroller/

