

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



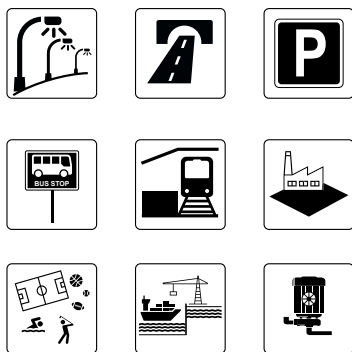
iDC-IOT data concentrator is the intelligent interface between the luminaire controllers in the field and the central management system.

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).

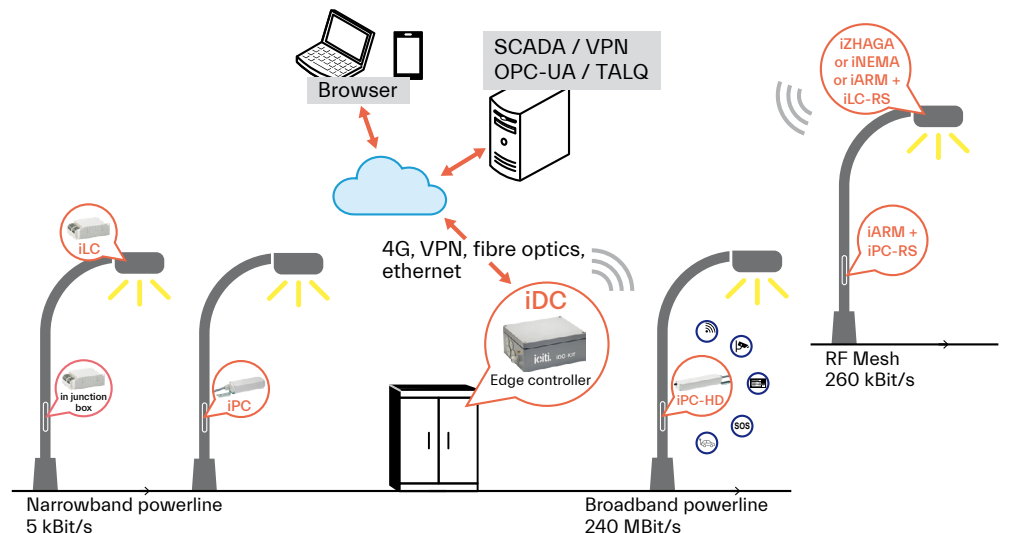
In addition, the iDC-IOT decentralises important functions of the control technology to ensure autonomous and self-sufficient operation of the lighting system and Smart City applications.



Typical application fields

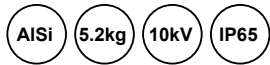
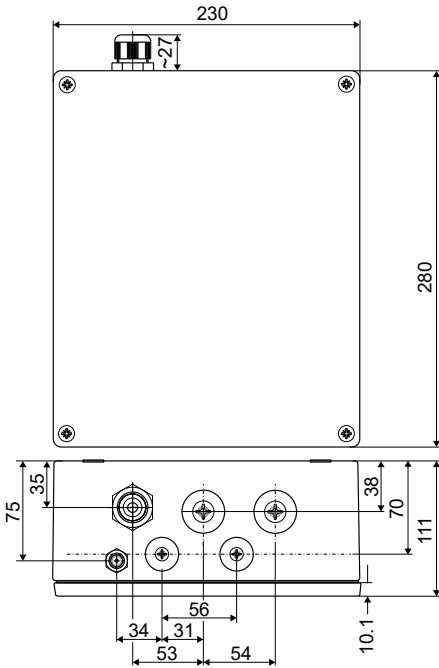


For remote control with central management



Dimensions (mm)

L 280 mm / W 230 mm / H 111 mm



| iDC-IOT | |
|---|---|
| Ref. No. | specified on the website www.icititech.com/products/idc-iot/ |
| 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 | EN 14908-1, ANSI/CTA 709.1 and EN 14908-3, ANSI/CTA 709.2 and EN 14908-8, ANSI/CTA 709.8 and EN 14908-10, ANSI/CTA 709.10 |
| 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) |
| Data transfer | Manager/Subordinate for max. 1000 luminaire controllers; repeating with dynamic monitoring of the communication path (in narrowband powerline operation, max. 200 luminaire controllers per iDC-IOT are recommended) |
| 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 |
| Software drivers | HD-PLC driver licence is available for all variants (ref. no. 200040) LoRaWAN driver licence is available for all variants (ref. no. 200048) |

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.icititech.com/products/idc-iot/

