**iPC-HD**

**intelligent Pole Luminaire Controller with High-speed Communication**

For efficient control of urban and street lighting and many Smart City applications

- High-definition powerline communication up to 240 Mbit/s
- IP and LON communication are provided
- IP65

The interoperable iPC-HD luminaire controller is designed for use in urban and street lighting.

iPC-HD operates with a standardised high-definition powerline for communication purposes and enables control of electronic operating devices fitted with a 1–10 V, PWM or DALI interface. The usage of devices with ethernet-connector via TCP/UDP/IP, like CCTVs, voice guidance systems, emergency products, advertising panels, support for WiFi access points etc. is possible.

The iPC-HD has to be mounted into the luminaire pole without need of junction box thanks to IP65 casing. In addition to the iPC features this controller can be used to forward data for other Smart City applications, by the use of existing infrastructures and therefore facilitate the integration of a wide range of functionalities in a single communication channel.

Any external sensor can be added thanks to dry-contact input.

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For remote control with central management

- SCADA / VPN
- OPC-UA / TALQ
- 4G, VPN
- fibre optics, ethernet

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- Edge controller
- iPC-HD
- IDC

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### iPC-100-HD

<table>
<thead>
<tr>
<th>Ref. No.</th>
<th>200011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mains voltage/frequency</td>
<td>85–305 V AC, 50/60 Hz</td>
</tr>
<tr>
<td>Power consumption</td>
<td>~ 3 W</td>
</tr>
<tr>
<td>Communication</td>
<td>via high-definition powerline in acc. with CENELEC 50065-1 / IEEE 1901, class 2 acc. to 2000/299/EC</td>
</tr>
<tr>
<td>Band / Coding</td>
<td>2–28 MHz / OFDM</td>
</tr>
<tr>
<td>Standard compliance</td>
<td>EN 14908-1, ANSI/CTA 709.1 and EN 14908-8, ANSI/CTA 709.8</td>
</tr>
<tr>
<td>LonMark® OLC profile</td>
<td>Interoperable, use of mandatory network variables and configuration parameters, repeatable</td>
</tr>
<tr>
<td>Galvanic isolation</td>
<td>Isolation of control outputs for 1–10 V / PWM / DALI operating device</td>
</tr>
<tr>
<td>Switching current</td>
<td>10 A resistive load → 100,000 switching cycles 6 A PF = 0.7 inductive load → 15,000 switching cycles 2.5 A PF = 1 LED driver → 25,000 switching cycles For any further load please ask for support</td>
</tr>
<tr>
<td>Control output</td>
<td>2 x for connecting several luminaires; short-circuit proof, switchable 1–10 V, PWM or DALI interface; addressing range of the DALI interface: max. 4 ballasts</td>
</tr>
<tr>
<td>Firmware update</td>
<td>via high-definition powerline</td>
</tr>
<tr>
<td>Control parameters</td>
<td>Switch on and off, dimming</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>≈ 25 to +70 °C</td>
</tr>
<tr>
<td>Storage temperature range</td>
<td>≈ 25 to +85 °C</td>
</tr>
<tr>
<td>Humidity</td>
<td>90% non-condensing</td>
</tr>
<tr>
<td>Connection cable</td>
<td>1 mm², usable lead length: 900 mm</td>
</tr>
<tr>
<td>Accessories</td>
<td>Ref. No. 200029: 2 m length or Ref. No. 200030: 7.5 m length</td>
</tr>
</tbody>
</table>

### Typical application fields

- ✔ Dimming ON/OFF
- ✔ Maintenance factor function to ensure a constant luminous flux over the lamp lifetime.
- ✔ Using the control input (e.g. with a push button or motions sensor) the system can be switched to a certain lighting level for a freely configurable period of time.
- ✔ Connection of external IP devices like CCTV, emergency call, loudspeaker, Wifi access points...

### Measured data

- ✔ Voltage
- ✔ Current
- ✔ Power factor
- ✔ Power consumption
- ✔ Energy
- ✔ Temperature
- ✔ Operating hours
  with an accuracy of better than 1%

For more detailed information please visit our website [www.icititech.com/products/ipc-hd/](http://www.icititech.com/products/ipc-hd/)

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