

## INKNXDAL0640200

### DALI to KNX gateway

Order Code:

INKNXDAL0640200 (64 ballasts, 1 DALI channel)

#### HOW IT WORKS

The Intesis **INKNXDAL0640200** Gateway has been specially designed to work as a translator between a DALI installation and a KNX TP-1 based Installation.

Intesis acts as a master in the DALI bus, allowing KNX devices to read and write on all configured DALI signals.

KNX bus is connected to the specific KNX TP-1 port of the gateway. On the DALI side, the gateway simulates a DALI-2 master device allowing other DALI/DALI-2 devices to be present in the DALI channels.

Each signal from the DALI bus can be associated to specific KNX group addresses, which can be accessed from a standard KNX installation. Those signals allow control and monitoring for these specific DALI signals from the KNX installation.

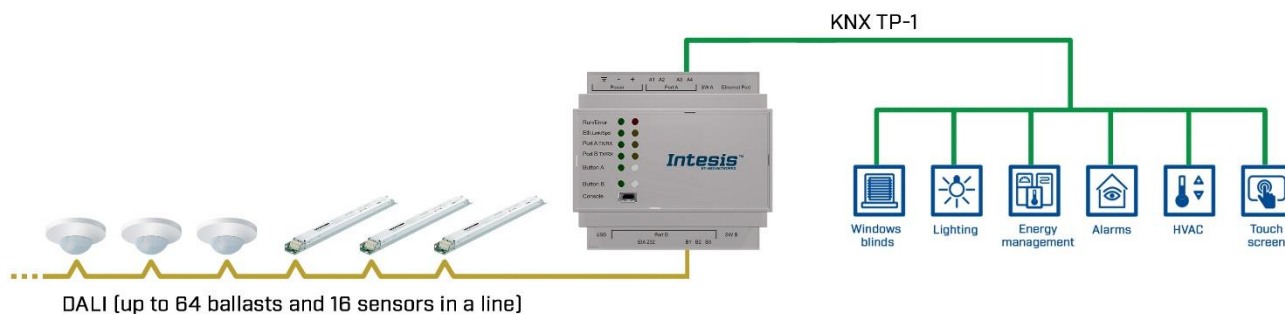
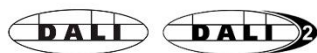
Configuration project and DALI commissioning is done through Intesis MAPS.



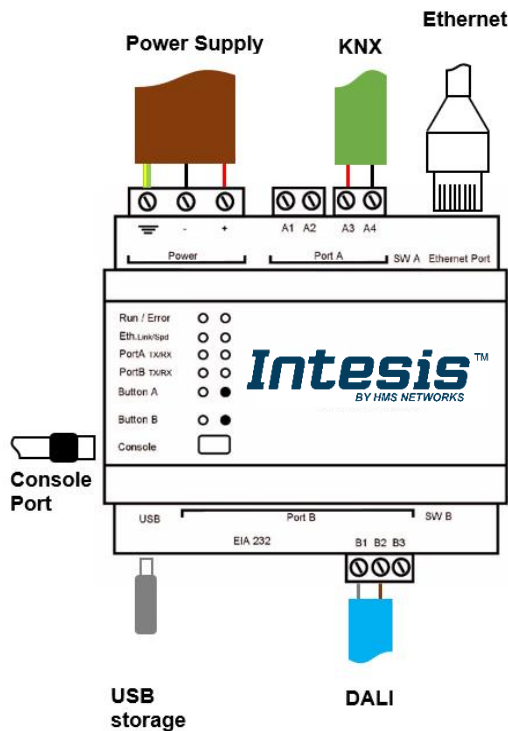
#### FEATURES

- Handles conversion between KNX and DALI/DALI-2 ballasts and DALI-2 sensors (occupancy and light instances)
- Designed following DALI IEC 62386 standard and certified by DiiA
- Supports parts 201, 202 y 207 for ECGs
- Supports parts 303 and 304 for Sensors
- DALI line scan (ballast detection) and commissioning
- Configuration through IP or USB (Console) port
- Front cover LED indicators to provide easy to check communication status on both the Ethernet and serial ports
- Includes Intesis MAPS with automatic updates for both Intesis MAPS and Gateway's firmware

#### INTEGRATION EXAMPLE



## CONNECTIONS



## PROTOCOLS



DALI is an industry-standardized protocol, for digital lighting control, and is specified in the multi-part international standard **IEC 62386**.

The digital nature of DALI allows **two-way communication** between devices, so that a device can report a failure, or answer a query about its status or other information.

Wiring is relatively simple; DALI power and data is carried by the same pair of wires, without the need for a separate bus cable

For further information visit <https://www.digitalilluminationinterface.org>



KNX is the world's only open Standard for the control in both commercial and residential buildings.

This standard is based upon more than 20 years of experience in the market. Bus devices can either be sensors or actuators needed for the control of building management equipment such as: lighting, blinds/shutters, security systems, energy management, heating, ventilation and air-conditioning systems, signaling and monitoring systems, interfaces to service and building control systems, remote control, metering, audio/video control, white goods, etc.

For further information, please visit [www.knx.org](http://www.knx.org)

## COMMUNICATION

|                            | KNX  | DALI   |
|----------------------------|--|--|
| <b>Connection</b>          | TP-1   | DALI   |
| <b>Date rate</b>           | 9.6 kbps   | 1.2 kbps   |
| <b>Data Types</b>          | DPT_1.x (1 bit)<br>DPT_8.x (2 byte signed)<br>DPT_5.x (1 byte unsigned)<br>DPT_7.x (2 byte unsigned) | Part 201: Fluorescent lights (DALI type 0)<br>Part 202: Emergency lights (DALI type 1)<br>Part 207: LED modules (DALI type 6)<br>Part 103: Control devices<br>Part 303: Occupancy sensors<br>Part 304: Light sensors |
| <b>Functions supported</b> |  |  |

## ELECTRICAL & MECHANICAL FEATURES

|  |  |
|--|--|
| <b>Enclosure</b>   | Plastic, type PC (UL 94 V-0)<br>Net dimensions (dxwxh): 90x88x56 mm<br>Recommended space for installation (dxwxh): 130x100x100mm<br>Color: Light Grey. RAL 7035  |
| <b>Mounting</b>  | Wall.<br>DIN rail EN60715 TH35.  |
| <b>Terminal Wiring</b><br>(for power supply and low-voltage signals) | Per terminal: solid wires or stranded wires (twisted or with ferrule)<br>1 core: 0.5mm <sup>2</sup> ... 2.5mm <sup>2</sup><br>2 cores: 0.5mm <sup>2</sup> ... 1.5mm <sup>2</sup><br>3 cores: not permitted<br>If cables are more than 3.05 meters long, Class 2 cable is required. |
| <b>Power</b>   | 1 x Plug-in screw terminal block (3 poles)<br>Positive, Negative, Earth<br>24VDC   |
| <b>Ethernet</b>  | 1 x Ethernet 10/100 Mbps RJ45<br>2 x Ethernet LED: port link and activity  |
| <b>Port A</b>  | 1 x KNX TP-1 Plug-in screw terminal block orange (2 poles)<br>2500VDC isolation from other ports<br>KNX power consumption: 5mA<br>Voltage rating: 29VDC<br>1 x Plug-in screw terminal block green (2 poles)<br>Reserved for future use   |
| <b>Switch A</b><br>(SWA)   | 1 x DIP-Switch for PORT A configuration:<br>Reserved for future use  |
| <b>PORT B</b>  | 1 x Serial EIA232 (SUB-D9 male connector)<br>Reserved for future use<br>1500VDC isolation from other ports (except PORT B: EIA485)   |
| <b>Switch B</b><br>(SWB)   | 1 x DIP-Switch for PORT A configuration:<br>Reserved for future use  |

|                              |   |
|------------------------------|---|
| <b>Battery</b>               | Size: Coin 20mm x 3.2mm<br>Capacity: 3V / 225mAh<br>Type: Manganese Dioxide Lithium   |
| <b>Console Port</b>          | Mini Type-B USB 2.0 compliant<br>1500VDC isolation  |
| <b>USB port</b>              | Type-A USB 2.0 compliant<br>Only for USB flash storage device<br>(USB pen drive)<br>Power consumption limited to 150mA<br>(HDD connection not allowed)                      |
| <b>Push Button</b>           | Button A: Check the user manual<br>Button B: Check the user manual  |
| <b>Operation Temperature</b> | 0°C to +60°C  |
| <b>Operational Humidity</b>  | 5 to 95%, no condensation   |
| <b>Protection</b>            | IP20 (IEC60529)   |
| <b>LED Indicators</b>        | 10 x Onboard LED indicators<br>2 x Run (Power)/Error<br>2 x Ethernet Link/Speed<br>2 x Port A TX/RX<br>2 x Port B TX/RX<br>1 x Button A indicator<br>1 x Button B indicator |

