Installation Guide for the INKNXDAL0640300 Gateway

Document version: 1.0.0

Intesis DALI-2 to KNX TP Application with 1 DALI Channel

Order code: INKNXDAL0640300

Owner's record

Find the serial number on the silver label on the right side of the gateway. We recommend you write it in the space below for sales or technical assistance:

SN:

Safety Instructions

Follow these safety and installation instructions carefully. Improper work may lead to serious harm to your health and may seriously damage this Intesis gateway and/or any other installation equipment.

Only accredited technical personnel, following all these safety instructions and in accordance with the country's legislation for the installation of electric equipment, are authorized to install this Intesis gateway.

Install this Intesis gateway indoors, in a restricted access location, and sheltered from direct solar radiation, water, high relative humidity, or dust.

Mount this Intesis gateway, preferably, on a DIN rail inside a grounded cabinet following the instructions below.

Follow country-specific safety and accident prevention rules as well as all current KNX guidelines.

Follow country-specific rules and regulations for the planning and construction of installations, especially with regard to emergency lighting systems.

Disconnect any wires from its power source before manipulating and connecting them to this Intesis gateway. For the installation, the device must be switched to zero potential.

Respect the expected polarity of power and communication cables when wiring this gateway.

Supply the correct voltage to power this Intesis gateway. The admitted range voltage is detailed in the technical specifications table.

Do not open the device! Faulty devices must be returned to the manufacturer. Contact our support team.

Configuration

Three methods are available for the gateway configuration:

- Configuration and execution via DCA in ETS 5 or higher
- Configuration and execution via the integrated web server (requires an Ethernet network connection)
- Configuration and execution via the pushbuttons and the display on the device

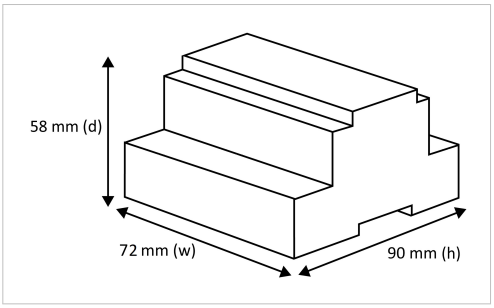
Refer to the **User Manual and Configuration Guide** document for more information about each method.

The special interface for configuring the DALI segments is designed as a DCA (Device Control App) for the ETS. Make sure that the corresponding ETS App is also installed in addition to the ETS product file available in the catalog. The ETS App can be obtained from the KNX shop or the Intesis website.

KNX Secure

For KNX secure installations, a QR code with the device certificate is supplied inside the box. Please keep this QR code together with the product documentation for future reference.

Dimensions



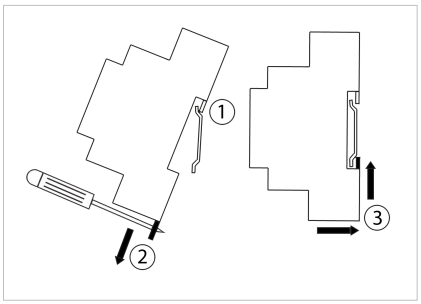
Leave enough clear space to wire the gateway easily and for the subsequent manipulation of elements such as connectors, pushbuttons, etc.

Mounting

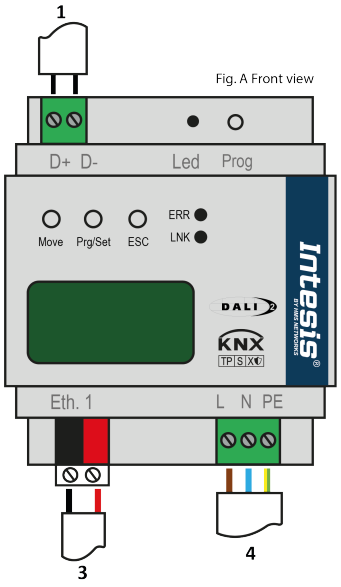
Mount this gateway over a DIN rail, preferably inside a grounded metallic industrial cabinet.

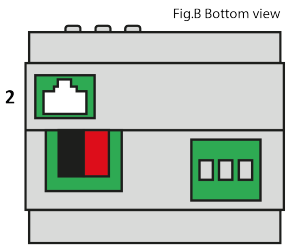
1. Fit the gateway's top-side clips in the upper edge of the DIN rail.
2. Press the low side of the gateway gently to lock it in the DIN rail.
3. Make sure the gateway is firmly fixed.

For some DIN rails, to complete step 2, you may need a small screwdriver or similar to pull the bottom clip down.



Connections





1. **DALI Channel /** Fig. A Front view
2. **Ethernet /** Fig.B Bottom view
3. **KNX /** Fig. A Front view
4. **Power Supply /** Fig. A Front view

Communication ports:

PORT	USAGE	WIRING		
D+ D-	DALI bus	**D+**: DALI +		**D-**: DALI -
Ethernet	Connection to a PC for configuration through the web interface	Ethernet cable (CAT 5 or higher)		
Black/Red	KNX bus	**Black**: -		**Red**: +
L N PE	Power supply	**L**: Line	**N**: Neutral	**PE**: Protective Earth

Technical Specifications

Housing	Material: Plastic, type ABS (UL 94 V-0) Color: Light grey (RAL 7035) Net dimensions (HxWxD): 90 x 72 x 58 mm / 3.54 x 2.83 x 2.28"
Weight	157 g
Mounting	DIN rail EN 60715 TH35
Power supply	• **Operating voltage**: 100 to 240 V, 50 to 60Hz AC • **Maximum power consumption**: 8W • **Bus power supply via KNX bus line**: SELV 24 V, ca. 5 mA
Connectors	• **Mains connector (L N PE)**: Screw connector 3x 1-2.5mm², single or threaded core • **DALI Bus (D+ D-)**: Screw connector 2x 1-2.5mm², single or threaded core • **KNX Bus**: Bus connector KNX, screwless 0.6 .. 0.8 mm, single core • **Ethernet Eth1**: RJ-45 plug connector for standard patch cables
Control elements	• Programming button to toggle between normal and addressing mode of the KNX • 3x buttons (Move, Prg/Set, ESC) for manual control and activation of broadcast and service functions
Display elements	• Led LED (top, red): Indicates normal/addressing mode • ERR LED (front, red): Signals fault status • LNK LED (front, yellow): Signals device Ethernet status • Liquid Crystal Display: For the configuration menu manual operation and device adjustments.
KNX bus	• **KNX Medium**: Twisted Pair (TP) • **Security**: KNX Data Secure
DALI bus	• **Number of outputs**: 1 DALI output • **Output type**: Multi-Master Application Controller • **Number of ballasts**: Max. 64 ECGs • **Number of sensors**: Max. 8 motion detectors and sensors • **DALI voltage**: Typical: 18 V DC, short-circuit proof max. 250 mA, basic insulation (no SELV) • **Recommended wire cross-section**: min. 1.5 mm² • **Guaranteed supply current**: 160 mA • **Maximum supply current**: 250 mA • **Shutdown delay**: 600 ms after DALI short circuit shutdown occurs • **Start-up attempt after shutdown**: 5 seconds after short-circuit detection
Ethernet	• **Type**: 100BaseT (100Mbit/s)
Electrical safety	• **Protection type (acc. to EN 60529)**: IP20 • **Overvoltage category**: III • **KNX bus**: SELV DC 24 V • **DALI bus**: Typic. 18 V DC, 250 mA base isolation (no SELV)
Environmental conditions	• **Environmental conditions during operation**: -5°C .. +45°C • **Storage temperature**: -25°C .. +55°C • **Transportation temperature**: -25°C to +70°C • **Rel. humidity (non-condensing)**: 5% .. 93%
Certification	• KNX certified • DIIA certified, according to EN 62386-101 ed.2 and EN 62386-103 ed. 2

Location and function of display and control elements: The device connections, as well as the elements learn button and programming LED required for KNX commissioning are only accessible in the distribution board when the cover is removed. The buttons required for DALI commissioning and parameterization (Move, Prg/Set, ESC), as well as reading the 2-line display and the control LEDs (ERR and LNK) can be operated with the distribution board cover closed.

Disposal and Recycling

This product contains electronic components and must be properly disposed of according to local laws and regulations. For further information, refer to: https://www.hms-networks.com/corporate-social-responsibility

For further information on the installation, connection, and configuration of this cascade controller, refer to the User manual.