TRIDONIC

connecDIM Gateway G1
Ethernet TCP/IP to DALI

Product description

- Independent lighting control for up to 256 DALI gears on 4 DALI lines
- Can be expanded by connecting multiple gateways on the same network
- Cloud based web interface for configuration and monitoring
- Simple setup via mobile App or Cloud service
- Status LED for indication the operating status
- Connects to Tridonic DALI Interface RS232 PS/S
- Works with Tridonic DALI comfortDIM portfolio
- Cross DALI line control with DALI XC, DALI touchPANEL and DALI MSensor
- Freely programmable daily scheduling with calendar function
- DALI emergency lighting unit test scheduling and monitoring via the connecDIM Cloud
- Cloud based maintenance, email alerts, predictive warnings and visual monitoring
- Open JSON-RPC TCP control protocol for linking to building automation systems
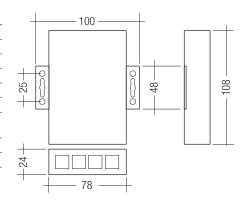- 5-year guarantee

TRIDONIC

RoHS

connecDIM Gateway G1
Ethernet TCP/IP to DALI

Technical data

Rated supply voltage DC	9 – 48 V
Power consumption	3.6 W (300 mA @ 12 V DC)
DALI interface RS232 PS/S ports	4 x RJ45 Serial Ports
Ethernet port	1 x 10/100 Mbit/s
Status indicators LED	Power, Ready, Ethernet, Serial Port
Operating Temperature	0 … +70°C
Mounting	Tabs with screw terminals; DIN rail kit available
Casing Material	Fanless metal casing
Type of Protection	IP20

Ordering data

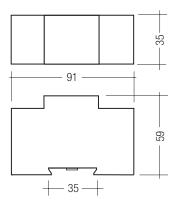| Type	Article number	Packaging carton	Weight per pcs.
connecDIM Gateway G1	**28000966**	1 pc(s).	0.405 kg

DALI Interface RS232 PS/S

Product description

- Combines interface module and DALI power supply
- Integrated power supply with 240 mA for DALI devices or DALI control modules without power supply
- Interface module for connection of DALI systems with computer or programmable control systems
- For installation in switching cabinets
- 5-year guarantee

Technical data

Rated supply voltage	110 – 240 V
Permitted input voltage	110 – 260 V
Mains frequency	50 / 60 Hz
Power	1 – 6 W
Standby power	1 W
Max. output current, DALI	240 mA
Output voltage	16 V ±5 %
Operating temperature	0 … +50 °C
Storage temperature	-20 … +60 °C
Max. casing temperature tc	80 °C
Permitted relative humidity	10 – 90 %, not condensed
Mounting	DIN rail mounting, 35 mm
Casing material	PC, flame retardant, halogen-free
Type of protection	IP20

Ordering data

Type	Article number	Packaging, carton	Weight per pc.
DALI Interface RS232 PS/S	**28001847**	100 pc(s).	0.09 kg

Specific technical data

Type	Input RS232	DALI output
DALI Interface RS232 PS/S	1	1

connecDIM RS232 cable

Product description

- Connection cable 1 m for connection of a DALI Interface RS232 PS/S to the connecDIM Gateway G1
- RJ45 to RJ45
- Transparent connector: connection to connecDIM Gateway G1
- Black connector: connection to DALI Interface RS232 PS/S

Ordering data

Type	Article number	Length	Packaging carton	Weight per pcs.
connecDIM RS232 cable	**28000968**	1 m	1 pc(s).	0.06 kg

connecDIM DIN-RAIL Mounting Kit

Product description

- DIN-RAIL Mounting Clips to mount the connecDIM Gateway G1 onto a 35 mm DIN-RAIL

Ordering data

Type	Article number	Packaging carton	Weight per pcs.
connecDIM DIN-RAIL Mounting Kit	**28000969**	1 pc(s).	0.03 kg

ACCES-SORIES

mains adapter x-touchPANEL

Product description

- Power supply for the DALI x-touchPANEL and the DALI e-touchPANEL
- The mains adapter is rated at 36 V
- Max. 2 gateways can be connected

Technical data

Rated supply voltage	230 – 240 V
Mains frequency	50 / 60 Hz
Max. power consumption	10 W
Output voltage	36 V
Max. output current	300 mA
Ambient temperature ta	0 … +50 °C
Type of protection	IP20

Ordering data

Type	Article number	Packaging carton	Weight per pcs.
mains adapter x-touchPANEL	**24166012**	1 pc(s).	0.155 kg

Standards

EN 61347-1
EN 61347-2-11
EN 60950-1
EN 55022
EN 55015
EN 61547
EN 61000-3-2
EN 61000-3-3
EN 61000-6-2
EN 50581

LED

Ready LED
After Power ON, the gateway starts booting. Once the system has booted up, the Ready LED will show solid green.

Link/Act LED
When the Ethernet port is connected to the network, Link/Act will show solid green and if there is traffic on the Ethernet, this LED will flash.

Serial Port LED
These four dual colour LEDs indicate data traffic at the serial ports. When the RXD line is high the green light will be ON and when the TXD line is high the yellow light will be ON.

Power Connector
Connect the 9 to 48 VDC power line to the gateway. If power is being supplied correctly, the power LED will show solid green.
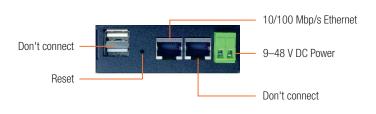
Serial Port
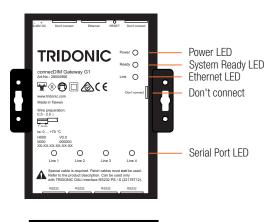
Serial Port Line 1 to Line 4
The four serial ports are configured to RS-232 and can be connected to TRIDONIC DALI Interface RS232 PS/S. They use RJ45 connectors and the pin assignment is shown in the following table.
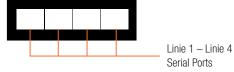
⚠ Please note that standard patch cables should **not** be used! Refer also to the product datasheet for TRIDONIC DALI Interface RS232 PS/S. Available online at www.tridonic.com.

Please ensure that the correct RJ45 connector is connected to the gateway and to the RS232 DALI Interface. The cables supplied are clearly marked with "BOX" or with different colors. The BOX end (transparent connector) goes to the gateway and the other end (black connector) goes to DALI Interface RS232 PS/S.

Gateway (RJ45)		Wiring:	RS232 PS/S (RJ45)	
pin 3	Ground	———	pin 4	Ground
pin 4	TxD	╳	pin 5	TxD
pin 5	RxD		pin 6	RxD
pin 8	DTR (for supply purpose only)	———	pin 3	DTR (for supply purpose only)
pin 2	RTS (for supply purpose only)	———	pin 8	RTS (for supply purpose only)

Gateway   connecDIM RS232 cable   RS232

Overview

The connecDIM system consists of a single four-channel RS232 Ethernet gateway connected to Tridonic DALI Interface RS232 PS/S and a wireless router. This enables 4 x 64 DALI devices to be networked and this DALI circuit to be controlled as a whole, thanks to controllers connected to the DALI circuit with mobile devices (iOS or Android operating system), irrespective of whether T5, T8, LED or Tunable White DALI devices are used. The system can be expanded to more than 4 DALI lines by connecting multiple connecDIM Gateways to the network. This allows local DALI control devices such as DALI XC or DALI

MSensors to control multiple devices on multiple DALI lines. The connecDIM system is a simple solution for providing DALI control over multiple DALI lines.

It also enables DALI system to be commissioned without having to use a laptop or dedicated software.

Two apps are available for the connecDIM System.

connecDIM Architect, commissioning app, available for iOS and connecDIM Lite, end-user app, available for iOS and Android.

Existing DALI applications can be simply upgraded by replacing the DALI power supply with DALI Interface RS232 PS/S and connecting the connecDIM Gateway. If an internet connection is used the system can be easily made available on the connecDIM Cloud.

Safety instructions

⚠️ The device may only be used for the specified area of application.

Relevant health and safety regulations must be observed.

The voltage supply must be disconnected when the device is being assembled and installed.

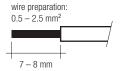Only qualified personnel may assemble, install and commission the device.

Do not use DALI Interface RS232 PS/S with any other devices that supply power (e.g. DALI PS).

Another way to test if another power supplying device is on the DALI signal wire is to connect:
DALI Interface RS232 PS/S to the DALI signal wire with the mains supply disconnected. If the power LED and the status LED are on (typically green) despite no mains supply to DALI Interface RS232 PS/S then another device is supplying power on the DALI signal wire.

Wiring type and cross section

The wiring can be solid wire, stranded wire or stranded wire with end sleeve with a cross-section of 0.5 mm² to 2.5 mm².

wire preparation:
0.5 – 2.5 mm²

7 – 8 mm

Storage of data

The connecDIM system collects data and stores it in the cloud.
Our storage policy is as follows:
• If the connecDIM system is used in combination with emergency applications, these emergency application data will be stored for a maximum of 24 months.
  Data older than 24 months will be automatically deleted.
• All other data collected in the cloud will be stored for 3 months.
  Data older than 3 months will be automatically deleted.

Data integrity in the cloud cannot be guaranteed as bad internet connections and other network anomalies may influence the correctness of the data displayed in the cloud.

Wiring examples