QBUS DMX INTERFACE (SER485/DMX)

Figure 1 : Qbus DMX interface (SER485/DMX)

1. Product Description

The Qbus DMX interface allows to control 254 DMX channels via the Qbus system. Choose colors, play scenarios, and control all these via the Qbus switches, detectors, displays or Qbus Cloud.

Per Qbus/DMX interface, up to 48 connections can be made between Qbus outputs and DMX channels. An RGBW mode uses 4 connections, so max. 12 RGBW modes can be used with one SER485/DMX. An RGB mode uses 3 connections, hence max. 16 can be used. Warm White Cold White mode uses 2 connections, hence 24 can be used. If these modes also need to be controllable via the Qbus Cloud, these modes will be duplicated so they can be controlled via the Cloud and via Qbus switches. Hence one Qbus DMX interface can support 6 RGBW modes, 8 RGB modes or 12 WWCW modes.

Via the Qbus configuration software, 20 fixed colors can be defined (using R-G-B %) and 4 DMX sequences (colors changing based on selected colors and defined timing between the colors) can be made. In total, 80 steps can be used by the sequences (4 sequences of each 20 steps, or one long sequence of 80 steps, or anything in between).

Each SER485/DMX module has a unique serial number enabling programming anywhere and anytime. All programming remains internally stored in a nonvolatile memory.

2. Safety Instructions

Read the complete manual before carrying out the installation and activating the system.

⚠ WARNING

- The devices must be mounted, commissioned and serviced by an authorized electrician in accordance with the country-specific regulations.
- The SER485/DMX device is exclusively suitable for DIN-rail mounting EN50022. It must be mounted in a fire-enclosure with ventilation holes.
- The devices must not be opened. The guarantee provisions will be void when the module has been opened.
- Electrical shock when live parts are touched.

3. Mounting and wiring of the SER485

FITTING:
Snap device onto DIN rail to DIN EN50022.

BUS WIRING:
It is recommended to use the Qbus cable or any other cable with minimum 2 x 1mm² conductors as a bus lead. The green protected EIB wire is also allowed when the conductors are guided per 2 in order to obtain a section of minimum 2 x 1mm2.
IMPORTANT : THE BUS CABLE SHOULD BE SHIELDED AND GROUNDED! THE GROUNDING SHOULD BE CONNECTED TO THE OVERALL GROUNDING OF THE BUILDING.

RS485/DMX:
The wiring between the DMX module and the RS485 connector needs to be done with massive conductors of up to 0,8mm2 (use typical telephone cable J-Y(ST)Y 2x2x0,8). The green EIB wire could also be used (use conductors separately).

POWER SUPPLY:
The SER485 is powered by the bus.

LED INDICATION SER485/DMX:
Green lights :
- PWR: ON = power is being supplied from bus.
- TX: ON = data is being transmitted to RS485 system
- RX: ON = data is being received from RS485 system

Red light: Status LED = ON for 2 seconds during start-up. Also ON during programming and when translation between Qbus and RS485 is ongoing.

4. Technical Data

GENERAL SPECIFICATIONS SER485

- Power supply : bus
- Ambient temperature :

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Working temp. range : 10°C to 50°C
Storage temp. range : -10°C to 60°C

- Maximum humidity : 93%, no moisture condensation
- Bus load : 30mA at nominal 13,8V
- Max installation altitude : 2.000 meters.

QBUS –DMX CONNECTIONS

- 48 connections maximum per SER485/DMX
- Warm White Cold White mode: uses 2 connections, hence 24 WWCW-modes maximum.
- RGB mode: uses 3 connections, hence 16 RGB-modes maximum
- RGB+ mode uses 4 connections, hence 12 RGB-modes maximum
- If these modes also need to be controlled via Qbus Cloud, they will be duplicated and hence only half the numbers of modes will be available: 12 WWCW modes, 8 RGB modes, 6 RGBW modes.

PHYSICAL SPECIFICATIONS SER485/DMX

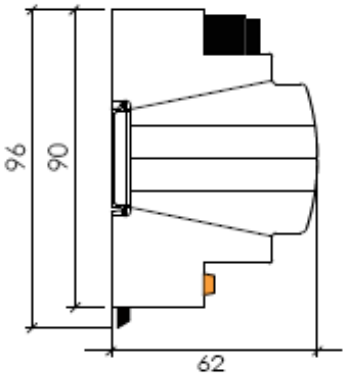
- Housing : Plastic, self-extinguishing according to UL94-V0
- Protection Degree : IP20, EN60529
- Installation : rapid mounting on DIN-RAIL, width 2 modules
- Dimensions (HxWxL) : 62mm x 90mm x 36mm
- Weight : approx. 0,072 kg

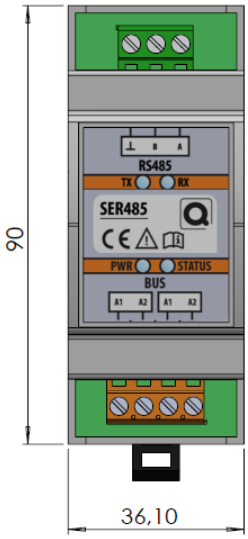
CE

- The product complies with EN 60730-1:2000-11 +A11 2002

5. Dimension Diagram SER485/DMX

Dimensions in mm.





Width = 2 modules.
1 Module = 17 mm.

6. Guarantee provisions

Period of guarantee: 4 years from date of delivery.
Guarantee will not be accepted if the device has been opened!
Any faulty devices should be send postage-free with a description of the defect to our central customer service office :

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