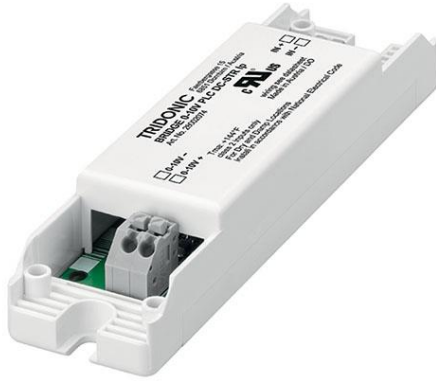


BRIDGE 0-10V PLC DC STR Ip

Bridge to convert 0...10 V into power line communication for DC-String system

**Product description**

- _ Bridge for converting analogue signals into PLC for DC-String dimming
- _ For connecting dimmable DC-String LMI LED driver in 0...10 V control systems
- _ For a maximum of 20 DC-String LMI LED driver / addresses
- _ On/off switching via DC-STR UNV FO Driver
- _ For the "group dimming" functionality by using standard 0...10 V dimmers
- _ Class 2 control device
- _ Dry and damp location
- _ Casing: polycarbonate, white
- _ 5 years guarantee (conditions at <https://www.tridonic.com/manufacture-guarantee-conditions>)

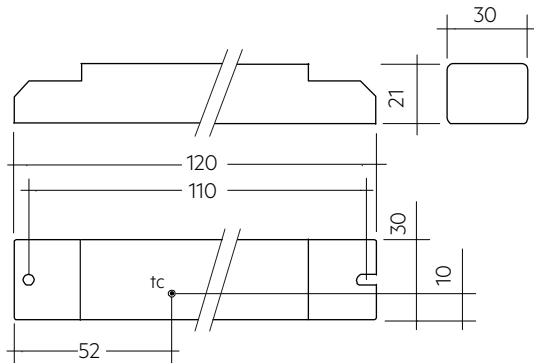
Website

<http://www.tridonic.com/>



BRIDGE 0-10V PLC DC STR Ip

Bridge to convert 0...10 V into power line communication for DC-String system

**Approval marks****Standards**

UL 8750, CSA C22.2, FCC PART 15

1. Standards

UL 8750
CSA C22.2
FCC Part 15

Product not designed for European Economic Area.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

1.1 Glow wire test

according to EN 61347-1 with increased temperature of 850 °C passed.

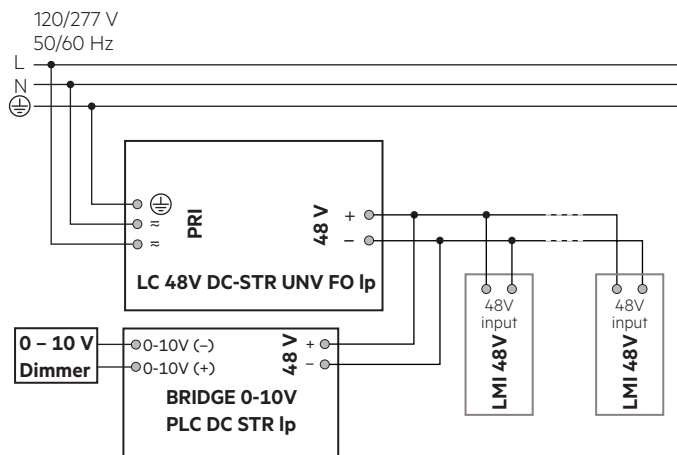
2. Thermal details and life-time

2.1 Expected life-time

Life-time is limited by DC power supply.
Max. tc point temperature must not be exceeded.

3. Installation / wiring

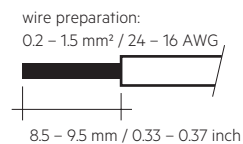
3.1 Circuit diagram



To use dimming functionality use dimmable LMI LED drivers with "DIM" in the product name.

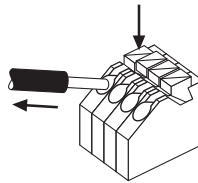
3.2 Wiring type and cross section

The wiring can be in stranded wires with ferrules or solid with a cross section of 0.2–1.5 mm² / 24 – 16 AWG.
Strip 8.5–9.5 mm / 3/8 inch of insulation from the cables to ensure perfect operation of the push-wire terminals.
Use one wire for each terminal connector only.



3.3 Loose wiring

Press down the "push button" and remove the cable from front.



3.5 Hot plug-in

BRIDGE is suitable for hot plug-in.
Devices will be switched off shortly for fadetime configuration at hot plug-in.
Maximum number of LMI LED Drivers is limited by 20.

4. Electrical values

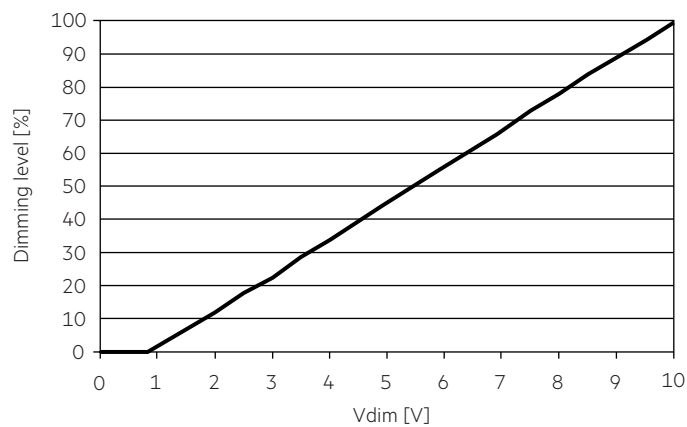
4.1 Dimming

Dimming range is 1 to 100%.

4.2 Dimming characteristics

Control input (0 – 10 V)

Control input open	max. dimming level
Control input short-circuited	off (stand-by)
Interface current range	540 μ A
Max. permitted input voltage	\pm 13 V
Voltage range dimming	1 – 10 V
Input voltage < 1 V	off (stand-by)
Input voltage > 10 V	max. dimming level



BRIDGE sends stand-by command to LMI LED Drivers from operation to stand-by for a voltage of < 0.8 V and from stand-by to on for a voltage of > 1 V.

4.3 Control input

To the 0...10 V interface passive potentiometers or 0...10 V voltage sources can be connected.

Control with passive potentiometers

To accurately adjust light levels it is recommended that you use a 22 k Ω potentiometer. If another potentiometer value is already in use, then install a suitable resistor in parallel or series.

Control with a 0...10 V voltage source

The 0...10 V input is supplying a control current for operation with passive potentiometers. In the event of using an active voltage source please be aware that this source has to be able to sink a current of 2 mA to enable correct adjustment.

In this case the voltage source has to supply a minimum current of 2 mA to reach the maximum needed output voltage of +10 V.

5. Miscellaneous

5.1 Conditions of use and storage

Environmental conditions: 5 % up to max. 85 %, not condensed (max. 56 days/year at 85 %)

Storage temperature: -25 °C up to max. +60 °C

The devices have to be acclimatised to the specified temperature range (ta) before they can be operated.

5.2 Additional information

Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

Life-time declarations are informative and represent no warranty claim. No warranty if device was opened.