

SIPslice DALI Converter

Datasheet



OVERVIEW

The Synapsys DALI Converter has been developed to provide an easy interface between a single DALI lighting loop and any lighting application controller, i.e. Synapsys Solutions LiGO+ controller. DALI provides ideal support for building control systems and enables each light source to be individually addressed, making it compatible with even small installations. DALI can be used in such installations as an independent lighting management system.

The SIPslice DALI Converter has been designed for receiving and transmitting data via the control network to individual luminaires, or groups of luminaires, to switch them on or off and/or to dim them, according to the defined BEMS protocol.

This product supports DALI communications as an RS232 or RS485 connection from an application controller and using an asynchronous, half-duplex, serial protocol over a two-wire DALI Bus (Dali Loop), with a fixed data transfer rate of 1200 bit/s. It allows a max 64 devices (e.g. electrical ballasts, sensors and dimmers) per 300m DALI Network using any topology (star, daisy-chain, etc).

DALI compliant luminaires are able to send status information (ECG errors/ lamp errors) back up to the next level control system. It is resistant to sustained short circuit and requires 24VDC power supply.

FEATURES

- Compatible with our preferred PSU
- Compatible with application controllers
- Small footprint



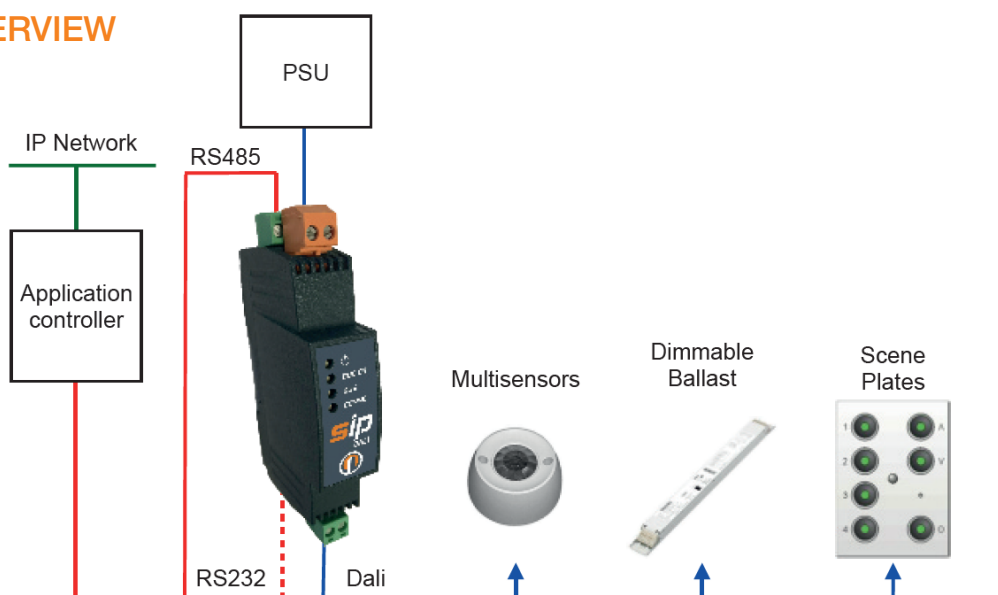
HARDWARE

- LEDs - Power, Bus activity, Bus activity and Comms activity
- 1 x RS485 connection
- 1 x RS232 connection
- 1 x DALI connection

SOFTWARE

- RS485: 1200 Bit/s
- RS232: 1200 Bit/s

SYSTEM OVERVIEW



NOTE: The RS485 connection does NOT support multidrop networks. Requires a 1A PSU (as supplied by Synapsys Solutions).

SPECIFICATION

- **Dimensions:**
25W x 90H (110 with connectors) x 54D mm
- **Weight:**
100g
- **Power Input:**
Input Voltage Range: 24VDC
Power Consumption: 200 mA
- **Environmental:**
Operating Temperature: 0 to 70°C (32 to 158°F), 0 to 90% RH
Storage Temperature: -25 to 85°C (-13 to 185°F), 0 to 90% RH
- **Dali Voltage:**
All variants: 33.5V exc. load

HARDWARE CONNECTIONS

- **Serial:** 1 x RS485 port and 1 x RS232 port

INSTALLATION

- DIN rail mounting (TS35) only.

Caution When the maximum cable length is calculated the contact resistance must also be taken into account.

Dali protocol states

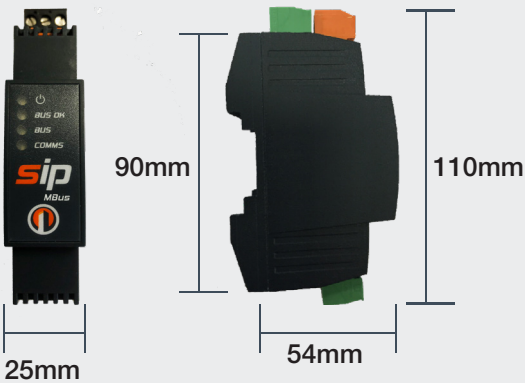
- Up to 64 devices per loop, arranged in a daisy-chain, or star topology, or a combination of both
- asynchronous, half-duplex, serial protocol over a two-wire bus (min. 1 mm cross-section cable)
- Fixed data transfer rate of 1200 bit/s
- Mains-rated, with 600 V isolation, and a max drop of 2 volts along the cable (max 300m)

NOTE: Contact the lighting device manufacturer for termination and cable recommendations.

CONFIGURATION

- Each DALI Converter supports a 64 addresses.

Tip! Some devices require more than 1 (one) device address.



SIPslice DALI product range

Order code	Description
SYN/DALI/CONV	Supports a maximum of 64 addresses
SIP+ EMT-IF	See SIP+ product range
PSU/24VDC/1A	24V 1A DC Power Supply

With a comprehensive range of interface products for BACnet, M-Bus, ModBus, SNMP and Trend protocols we can help you easily link meter, sub-meters and plant to Trend or BACnet BeMS systems with energy management and monitoring functionality, and virtual metering.

Contact us for more information or to request a quote.