



The Schröder ITERRA MODULE NODE BLE4 is a base communication module in the ITERRA control system that converts a wired DALI, 0-10V or 1-10V signal into BLE wireless communication in a mesh network. The node offers a solution to seamless control for site lighting through a mesh Bluetooth™ 4.0 network. Each control node stores information about its configuration and the configuration of the rest of the network.

This communication module has a universal input voltage range of 100 to 277 VAC and can be supplied from the DALI bus PSU instead of the mains voltage if required. It acts as both a controller and a bus power supply, allowing up to 8 LED drivers (multi-DALI mode) or 10 LED drivers (broadcast mode) with a DALI interface to be connected directly without the need for an external DALI power supply.

Configuration and control can be managed from a mobile phone or tablet using the free Schröder ITERRA mobile App, available for iOS and Android devices. To control the nodes, it is only necessary to be close to one of them. Communication security is provided by encrypted messages.

The primary use of the Schröder ITERRA MODULE NODE BLE4 is to control indoor lighting applications (IP20 enclosure). Electrical connection and mechanical fixing are done through a standard screw terminal block.

## KEY ADVANTAGES

- > **Cost-effective: one node can control up to 8 DALI drivers separately or 10 drivers in broadcast (depending on the DALI bus current)**
- > **Compatible with any DALI, 0-10V, 1-10V drivers**
- > **Scalable solution: a Schröder ITERRA network can manage up to 100 nodes**
- > **Wireless mesh: network coverage of up to 100m between nodes. The nearest node acts as a range extender for the other ones**

### DIMENSIONS AND MOUNTING

Dimensions lwxhx (mm   inch)	76x26x23   2.99x1.02x0.90
Weight (gr   oz)	40   1.39
Mounting	Screw on mounting plate inside a luminaire or in a wall-mounted box (not provided)
Wiring	Solid and stranded / 0.5-1.5mm <sup>2</sup> /16-20 AWG / Stripping length: 6-7mm   0.25"
Tightening torque	0.4Nm/4Kgf.cm
Protection class	Built-in Class II

### HOUSING AND FINISH

Housing	LEXAN Resin 945
Standard colour	White

### ENVIRONMENTAL

Ta	-20 to +45°C   -4°F to +113°F
Tc (Max. case temperature)	+70°C   +158°F
Storage temperature	-25 to +70°C   -13°F to 158°F
Degree of protection	IP 20 (indoor use only)

### ELECTRICAL

Rated Input Voltage/frequency	100-240VAC/277VAC - 50/60Hz
Max. mains current	35mA
Standby power	<0.5W
Electrical class	Class II EU (double insulation)
Output control interface	0-10V/DALI/DALI-2
Ch 1 Output voltage 0-10V	0-10VDC max. 7mA (sinking)
Ch 1 Output voltage, DALI	12VDC
Ch 1 DALI Bus current	max. 20mA (sourcing)
Ch 2 Output voltage 0-10V	0-10VDC, max.
Ch 2 Output current	7mA (sinking)
Ch 2 Output voltage, relay control	12VDC, max.
Ch 2 Output current, relay control	100mA (sourcing)

### STANDARDS & APPROVALS

CE, UL-US, UL-CA, IC, FCC, RoHS	Yes
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### EMC AND IMMUNITIES

RF output power	EN 300 328 V2.1.1 (2016-11)
Power spectral density	EN 300 328 V2.1.1 (2016-11)
Occupied channel bandwidth	EN 300 328 V2.1.1 (2016-11)
Transmitter unwanted spurious emissions in the out-of-band domain	EN 300 328 V2.1.1 (2016-11)
Transmitter unwanted spurious emissions in the spurious domain	EN 300 328 V2.1.1 (2016-11)
Receiver spurious emissions	EN 300 328 V2.1.1 (2016-11)
Receiver blocking	EN 300 328 V2.1.1 (2016-11)

### RADIO FREQUENCY SPECIFICATIONS

Communication interface	Bluetooth 4.0 (BLE)
Frequency range	2401-2483 MHz
Maximum transmission power	-4dBm
Wireless class	Class 2

### COMMUNICATION FEATURES

Data security	AES128 bit encryption + elliptical cryptography (see security overview)
Firmware update	OTA (Over the air)
Real-time counter	Update with the Schröder ITERRA App, external timer or gateway
DALI details available	<ul style="list-style-type: none"> <li>• Device type</li> <li>• Total energy</li> <li>• Resettable energy counter</li> <li>• Active power</li> <li>• System and lamp on time</li> <li>• Mains voltage and mains current</li> </ul>
Network coverage	<100m (open air and clear view)