



The Schröder ITERRA NEMA NODE BLE4 is the base communication module of the ITERRA control system that converts a wired DALI signal into BLE wireless communication in a mesh network.

The node offers a solution to seamless control for sports 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. The mesh network provides a high level of robustness and simplifies the replacement of control nodes as programming them is not required. Electrical connection and mechanical mounting are achieved by tool-free twist and lock on a standard NEMA 7-pin socket (ANSI 136.41).

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. Adding a node to the network is done individually using the mobile App within a range of one unit (up to 100m) from the mesh network. To control the nodes, it is only necessary to be within the scope of one of them and use the Schröder ITERRA mobile App or a Schröder ITERRA PRESS remote control. When a node receives a firmware update, it is automatically retransmitted to the other ones (up to 250 nodes per network). Communication security is provided by encrypted messages. Various communication profiles can be configured to match the luminaire requirements.

The primary use is to control outdoor lighting applications (IP 66 UV-resistant enclosure), although indoor applications are also possible.

KEY ADVANTAGES

- > **Cost-effective: one node can control up to 8 DALI drivers**
- > **Scalable: a Schröder ITERRA network can manage up to 250 nodes**
- > **Wireless mesh: network coverage of up to 100m between nodes. The nearest node acts as a communication gateway with the other ones.**
- > **Operating DALI data available for each node**
- > **Controlled by the Schröder ITERRA App and PRESS remote control**

DIMENSIONS AND MOUNTING

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|----------------------------|--|
| Dimensions Øxh (mm inch) | 81.2x75.4 3.2x3 |
| Weight (gr oz) | 150 5.3 |
| Mounting | Twist and lock on a NEMA 7-pin socket (ANSI C136.41) |

GENERAL INFORMATION

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|--|----------|
| Recommended installation height (m ft) | 5 16.4 |
| CE mark | Yes |
| LvD | Yes |
| Reach | Yes |
| ReD | Yes |
| RoHS | Yes |
| UL | Pending |

HOUSING AND FINISH

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|---------------------|-----------------------------------|
| Housing | Polycarbonate (anti-UV treatment) |
| Standard colour | Semi-transparent black |
| Tightness level | IP 66 (with hydrophonic vent) |
| Impact resistance | IK 09 |
| Working temperature | -40°C to +80°C -40°F to +176°F |

ELECTRICAL INFORMATION

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|--------------------------|--|
| Electrical class | Class II EU |
| Nominal voltage | 110-240V AC - 47-60Hz |
| Power consumption | Idle mode: <0.8W@230VAC With 1 DALI device: <1W@230VAC |
| Output control interface | DALI/DALI-2 according to IEC 62386-101, -102, -201, -203, -207, -250, -251, -252, -253 (pending) |
| Bus voltage | 16V DC |
| Bus current | 100mA max. |

EMC AND IMMUNITY

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|-------------------------------------|---|
| Electromagnetic compatibility (EMC) | EN 55015:2013, EN 61547:2011, EN 61000-3-2, 3-3, EN 301489-1, -17 |
| Surge protection | L-N: 0.5kV N-PE: 2kV L-PE: 2kV |

RADIOFREQUENCY SPECIFICATIONS

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|-------------------------|--|
| Communication interface | Bluetooth 4.0 Low Energy (BLE) |
| Frequency range | 2402-2483 MHz |
| Network type | Self-healing, frequency-hopping, spread-spectrum mesh technology |
| Max. transmission power | +4dBm |
| Wireless class | Class 2 |

COMMUNICATION FEATURES

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|-------------------|---|
| Data security | AES128 bit encryption + elliptical cryptography |
| Firmware update | OTA (over the air) |
| Real-time counter | Update with the Schröder ITERRA mobile application |
| DALI information | Real-time updating of the following DALI info through the App: device type, total energy, resettable energy counter, active power, system on time, luminaire on time, mains voltage, mains current. |
| Network coverage | < 100m between two nodes, depending on installation height and presence of obstacles |

SAFETY

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|------------|---------------------------------------|
| Luminaires | EN 61347-1:2016 & EN 61347-2-11:2003 |
| Protection | Line overvoltages, surge, temperature |