# Schréder
Experts in lightability™

OWLET FOUR NEMA luminaire controllers

OWLET FOUR is Schréder's latest generation of wireless luminaire controllers designed for smart lighting solutions. **OWLET FOUR** controllers are easy to install: commissioning is plug-&-play, and controllers can send a last message when power is cut off. This system benefits from both mesh and cellular networks, optimising coverage, redundancies and increasing security. Controllers connect to EXEDRA, Schreder's advanced smart lighting management platform, where they can be controlled, managed and visualised. **OWLET FOUR** controllers work on Schréder luminaires or luminaires from other suppliers.

LIFTNODE N   MESHNODE N

EXEDRA
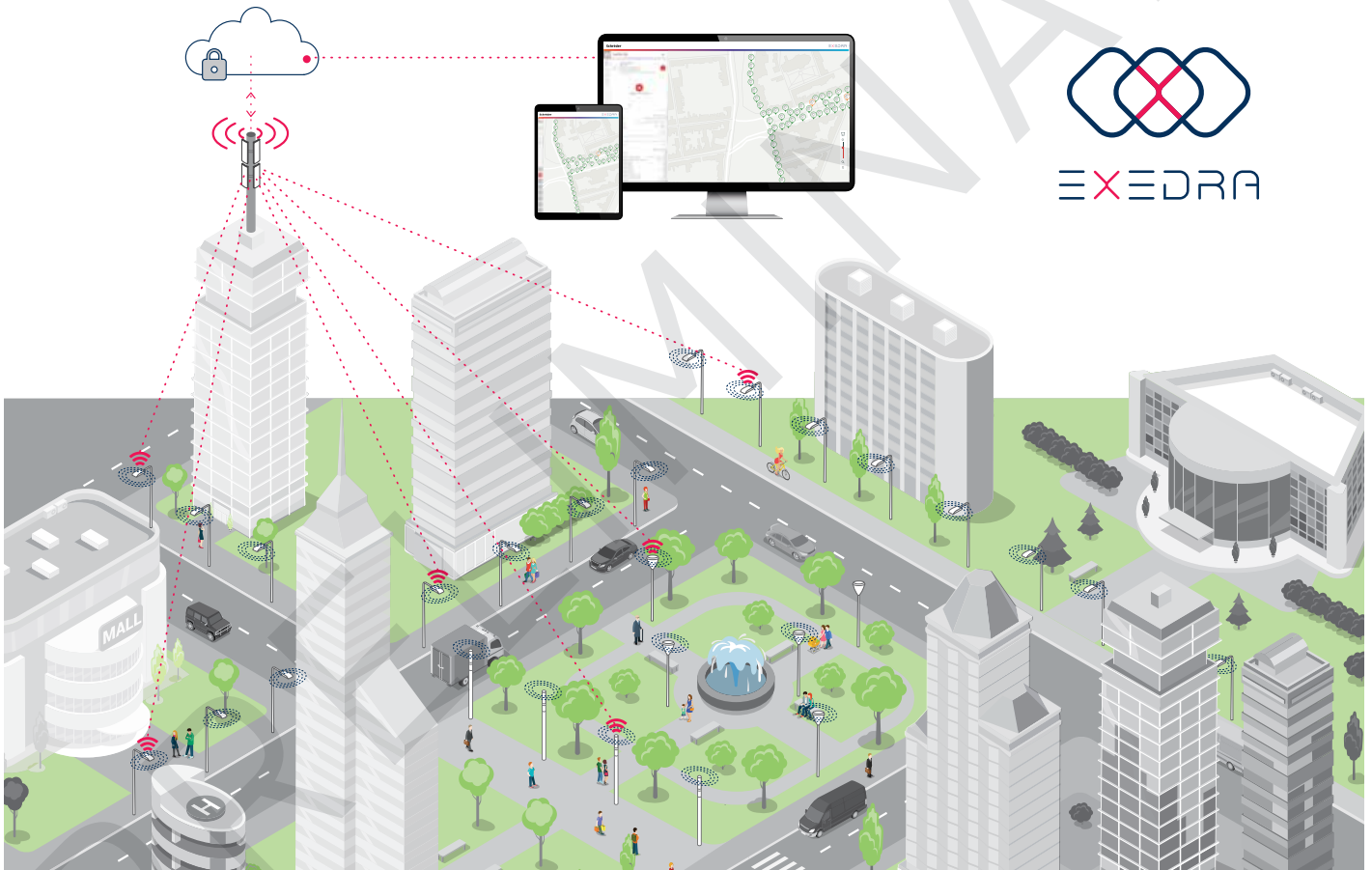
Benefits

- **Auto-commissioning**
  Easy installation and Plug and Play
- **Auto-geolocation**
  GPS-location detection and time synchronisation
- **Real time dynamic lighting**
  Mesh technology with sensor enabled controllers
- **Last gasp messaging**
  Integrated power bank allowing a last message for power outs
- **Asset management**
  Automatic device detection via RFID tag or asset data import
- **Tunable white**
  Ability to manage luminaires with variable colour temperature

Features

- Mesh + Cellular networks (2G/4G)
- Built-in GPS, photocell, and RFID reader
- Embedded self-test capability to check installation
- 0-10V and all DALI dimming interfaces
- Digital input for sensors (Occupancy: bicycle paths, etc.)

- +/- 0.5% metering accuracy
- Surge protection
- Reduced inrush current due to zero-crossing detection
- Last gasp – ability to send a last message when power is cut off
- End-to-end encrypted communication
- Over-the-Air firmware update

TECHNICAL INFORMATION - LIFTNODE N & MESHNODE N

90.7mm

ø92.2mm

LIFTNODE N

72.9mm

ø92.2mm

MESHNODE N

Metering and accuracy

Measured parameters	Power, Voltage, Current, Power Factor, Energy
Integrated energy metering accuracy	1% for load >= 15 W 5% for load < 15 W

Radio communications

Low-power mesh	IPv6, RPL, 6LowPAN, MAC - IEEE 802.15.4e, PHY – IEEE 802.15.4.g, 2400 MHz @ +10 dBm
Cellular modem (LIFTNODES only)	GSM: 1800MHz/900MHz UMTS: B1 (2100MHz)/B8 (900MHz) LTE-FDD: B1 (2100MHz)/B3 (1800MHz)/ B7 (2600 MHz)/B8 (900MHz)/20 (800MHz)/B28 (700MHz)

Mains voltage

Voltage (L - N)	110-240Vac ± 10%
Frequency	50/60Hz ± 5%
Max. load current	5A
Max. power at 5A	240V x 5A = 1200W
Required external fuse	[TBC]

DALI interface

Protocol	DALI compliant to IEC62386 Ed. 2
Load capacity	4 DALI devices
ESD rating	4kV HBM [TBC]
Protection	Interface is short circuit protected
Isolation	3108V to AC mains

Housing

Material	Makrolon 6557 Transparent, UV stable, Flame retardant
Colour	Light grey
Protection class	Ingress protection rating IP66 / DIN EN 60529
Impact protection	IK 08

0-10V interface

Protocol	Compliant to 0-10VDC IEC60929 (Annex E)
Min. control voltage	0.2V [TBC]
Load capacity	8 drivers
ESD rating	4kV HBM [TBC]
Isolation	3108V to AC mains

Average power consumption

Operating wattage	<2W

Sensor auxiliary power supply

12Vdc ± 0.5V, 4mA max. [TBC]	

Operating conditions

Ambient temperature (ta)	-40°C to +65°C 104°F to 149°F
Relative humidity	5% to 90%

GNSS (Global Navigation Satellite System)

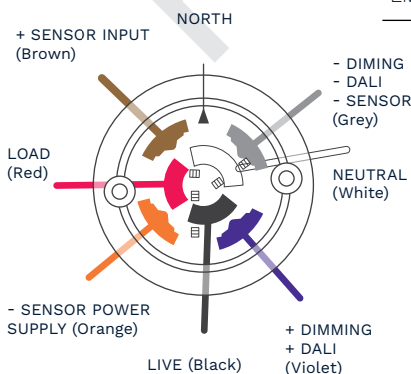|	
Supports	GPS system (L1C/A signals), Glonass system (L1OF signal), and SBAS (Satellite Based Assist System) [TBC]
Position accuracy	Up to 2.5m/ 8ft (with > 6 satellites) [TBC]

Standards & certificates [TBC]

Approvals	CE	Radio	EN 300 328 V2.1.1 (2.4 GHz SRD)
Standards	RE Directive (2014/53/EU) EMC Directive (2014/30/EU) LV Directive (2014/35/EU) RoHS Directive (2011/65/EU)	DALI Health Connector	DALI2 IEC62386 EN 62311 ANSI C136.10 and ANSI C136.41
EMC	EN 301 489-1 V1.9.2 (Part 1) EN 301 489-17 V2.2.1 (Part 17)	Electrical safety	EN 61347-1:2015 (Part 1) EN 61347-2-11:2001 (Part 2-11)

Electrical connections

NEMA TWIST LOCK (TOP VIEW) ANSI C 136.41

NORTH

+ SENSOR INPUT (Brown)

- DIMING
- DALI
- SENSOR (Grey)

LOAD (Red)

NEUTRAL (White)

- SENSOR POWER SUPPLY (Orange)

LIVE (Black)

+ DIMMING
+ DALI (Violet)

CE DALI 2
PENDING

Model	Part Number	Description
LIFTNODE N	01-78-662	2.4GHz Mesh, Cellular 2G/4G, NEMA socket
MESHNODE N	01-78-663	2.4GHz Mesh, NEMA socket