SHUFFLE

Spec Sheet | EXEDRA Owlet IoT Luminaire Controller

landscapeforms®

Schréder
Experts in lightability™

SHUFFLE can be integrated into EXEDRA, Shréder's innovative lighting control system to enable even greater data-driven control, effectiveness and cost savings. The LUCO P7 CM Luminaire Controller is a smart control module that monitors and controls LED or HID luminaires. It is designed for easy installation and Plug and Play commissioning. Insert, twist, and lock the LUCO P7 CM onto the 5 or 7 pin NEMA socket and your system is ready to go.

Key Advantages

- Auto-commissioning
- Auto-connectivity
- GPS-location
- Sensors enabled
- Asset management
- DALI and 1-10V Driver Support
- Integrated power meter with 1% accuracy (0-100% Dimming)

Applications

The LUCO P7 CM controls LED drivers and ballasts as per the wiring diagram (A). It is designed to replace a standard NEMA photocell (on a 5 or 7 pin socket) for use in outdoor luminaires for residential, road and urban applications.

General Operation

The LUCO P7 CM is designed to execute Plug and Play commissioning with instant connectivity over the existing cellular infrastructure without any need for an additional gateway or IT structure.
Each controller can communicate in two independent ways, cellular and RF-Mesh, offering instant, robust, reliable, and flexible connectivity.

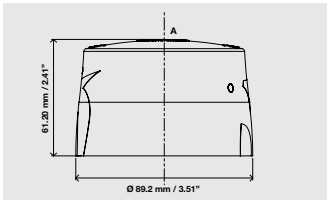
Communication between the luminaires, for exchanging sensor information for example, is done through a fast IP based self-forming RF mesh net, where one controller in the mesh also acts as a router module for the neighboring controllers through the Central Management System.

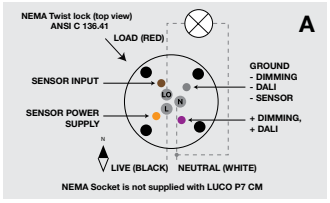
Asset-Management

An ID reader reads out the asset information stored in the luminaire tag for further use in the Central Management System asset application.

Asset-Management

An ID reader reads out the asset information stored in the luminaire tag for further use in the Central Management System asset application.





SHUFFLE

Spec Sheet | Exedra Owlet IoT Luminaire Controller

landscapeforms®

Schréder
Experts in lightability™

Auto-Commissioning
Due to its built-in GPS and cellular module the LUCO P7 CM supports auto-commissioning and auto-connectivity. Owlet controllers with GPS will automatically be imported and located in the Owlet IoT user interface.

Dimensions and Mounting
- A x B x C: 7.6” x 15.9” x 7.6” (194mm x 403mm x 194mm)
- Weight: 13.4 lbs (6.1kg)
- Aerodynamic resistance (C x S): 0.08
- Mounting: Clamps

Operating Conditions
- Ambient temperature (ta): -40° F to 158° F (-40°C to 70°C)
- Relative humidity: 10% to 90%

Non-Operating Conditions
- Temperature: -40° F to 175° F (-40°C to 80°C)
- Relative humidity: 5% to 90%

Mains Connection
- Mains voltage: 110-277VAC ± 10%
- Mains frequency: 50/60 Hz ± 5%
- Maximum load current: 5A
- Maximum power at 5A:
    - 600VA@120V
    - 1.2kVA@240V
    - 1.38kVA@277V
- Required external fuse: ≤ 10A

Power Consumption
- Stand-by wattage: < 1.0W
- Operating wattage: < 2.7W
- Integrated power meter accuracy: 1% and better (between 0% and 100% dimming)

Radio Frequency
- Protocol: Zigbee, IPv4
- Frequency bands RF output power:
    - Cellular GSM: 900MHz & 850MHz, +33dBm / 1800MHz & 1900MHz, +30dBm
    - Cellular UMTS/HSPA: 800MHz, 850MHz, 900MHz, 1900MHz & 2100MHz +24dBm
    - Zigbee: 2400MHz +10dBm
    - GPS: 1575.42 MHz <-47dBm receive only

DALI Output Interface
- DALI compliant to: IEC62386 part 101, 102, 201, 203, 207
- Load capacity: 4 drivers (DALI)
- Protection: Interface is short circuit protected
- DALI voltage: 12.0 to 20.5 Vdc
- DALI supply current: Max 16 mA

1-10V Interface
- Compliant to: 1-10VDC IEC60929 (Annex E)
- Load capacity: 4 drivers (1-10V)
- Load current: Interface is current sinking, max 16 mA

Housing
- Material: PC, UV stabilized
- Color: RAL 7042 translucent light grey
- Protection class: IP 66 (installed condition for controller only in combination with NEMA socket)

Mounting
- Push: +/- 55 N (12.5 Lb.)
- Rotation: 45° with max. 4.5 Nm (3.3 Lb.ft)

Standards & Legislation
- Approvals:
    - Radio Equipment Directive (2014/53/EU)
    - RoHS Directive (2011/65/EU)
    - Amendment (2015/863/UE)
- EMC:
    - EN 301 489-1
    - EN 301 489-17
    - Draft EN 301 489-52
    - Draft EN 301 489-19
    - Final draft EN 301 489-3
    - ANSI/IEEE C63.4
    - ICES-003
- Cellular:
    - EN 301 511 EN
    - 301 908-1
    - FCC/IC RSS-132
    - FCC/IC RSS-133
    - FCC/IC RSS-139
    - FCC/IC 47 CFR Part 22 Subpart H
    - FCC/IC 47 CFR Part 24 Subpart E
    - FCC/IC 47 CFR Part 27 Subpart C
- Radio:
    - EN 300 328
    - EN 303 413
    - 47 CFR Part 15 Subpart C §15.247 RSS-247
    - RSS-310
- RF-ID
    - EN 300 330
    - 47 CFR Part 15 Subpart C §15.225
    - RSS-210

Standards & Legislation (cont.)

- Safety
  - EN 61347-1
  - EN 61347-2-11
  - EN 60950-22
  - EN 60529
  - EN 62311
  - UL 773 (E359906)
  - C22.2 No. 182.2-M1987
  - CSA C22.2 No. 205-12
  - FCC/IC 47 CFR Part 2 Subpart J §2.1091 FCC/IC RSS-102
  - (FCC ID: 2AW4F-LCP7CM, IC: 26343-LCP7CM)
- Connector
  - ANSI C136.41, ANSI C136.10

Sensor Power Supply

- 12 Vdc ± 0.5 V, 2 mA max.

GPS Capabilities

- Supports GPS system (L1C/A signals provided at 1575.42 MHz)
- Supports SBAS (Satellite Based Assist System)
- Position accuracy up to 2.5m/ 8 ft (with > 6 satellites)