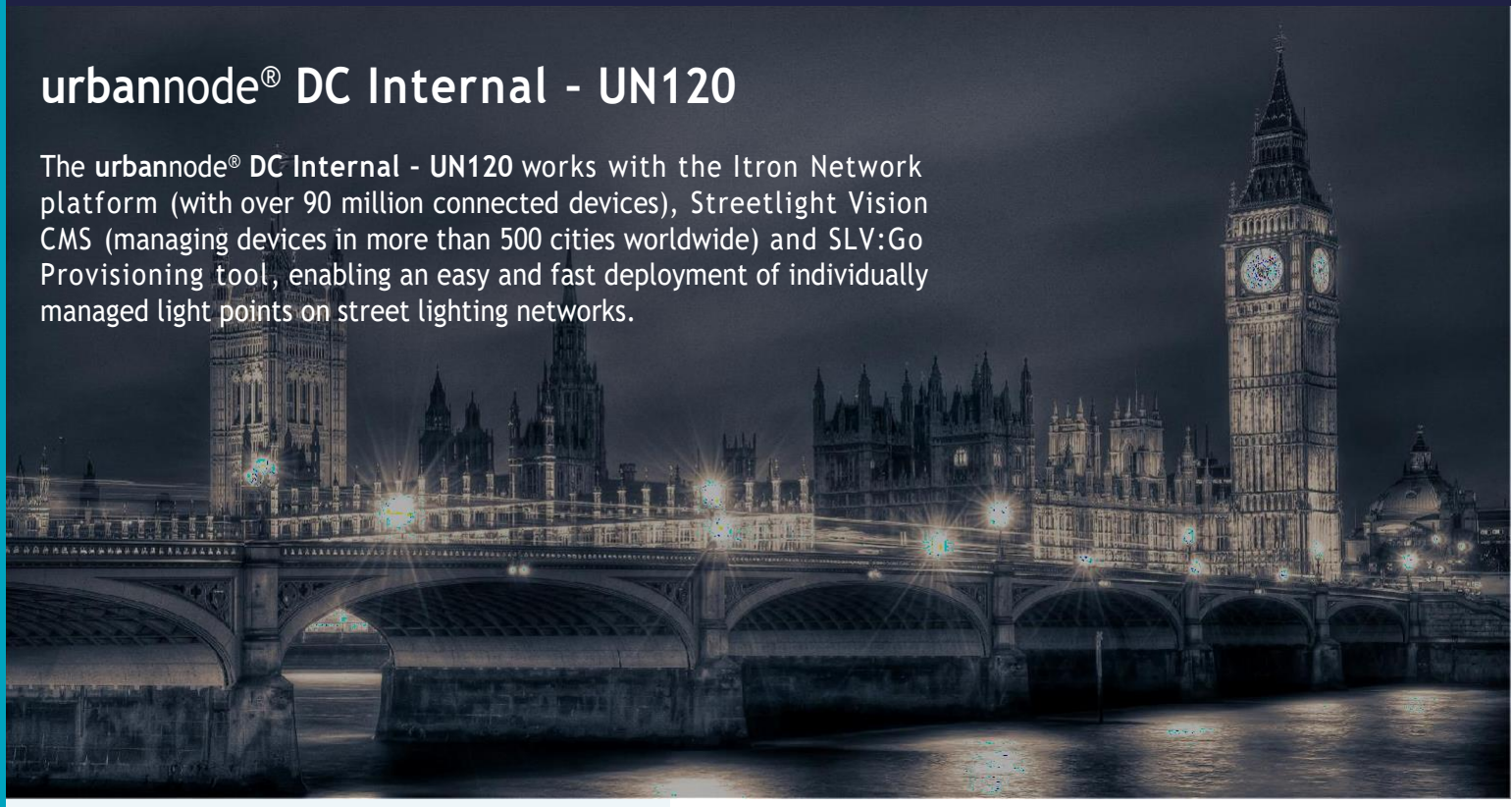
urbannode by obiWAN®

Data sheet

urbannode® DC Internal - UN120



The **urban**node® **DC Internal - UN120** works with the Itron Network platform (with over 90 million connected devices), Streetlight Vision CMS (managing devices in more than 500 cities worldwide) and SLV:Go Provisioning tool, enabling an easy and fast deployment of individually managed light points on street lighting networks.

Main features

- The **urban**node® DC Internal is a wireless module that fits discreetly inside decorative or heritage luminaires and require a separate external antenna to connect to the urban control network
- Extremely Low Power consumption
- D4i interface certified
- Onboard Real-Time Clock to prevent day burning
- Motion Detection Input Ready for Dynamic Lighting Scenario
- Asset Management oriented, extended control and data exchange with new D4i LED Drivers
- Over-the-air firmware upgrades
- Improved safety from the usage of an extra-low voltage power supply (24VDC)
- Easy and low cost installation inside a lighting fixture or column
- Accurate energy and electrical parameters metering suitable for supporting utility billing
- Automatic identification of all lamp failures reducing on site activities

Dimensions:

86 x 83 x 42mm (WxLxH)

obiWAN®

Rua 28 de Janeiro, 350, Candal Park, CC-12

4400-335 Vila Nova de Gaia - Portugal

t: +351 227 662 711 | e: connected@obiwan-conobi.com

w: obiwan-conobi.com

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Technical specifications

Operating Voltage	• 24VDC
Power Consumption	• Average < 0.7 W
Interfaces	• Output Control: D4i (DALI2 bus) • Digital Input: Max. 24VDC, 20mA
Onboard RTC	• Real-Time Clock prevents day burning effect by accurately tracking the astronomical clock and device calendar
Motion Detection	• Input Ready for Dynamic Lighting Scenario
Metering/Monitoring	• Accuracy: IEC (EN50470) or ANSI (ANSI C136.52), line and load side • Metered parameters: Voltage, Current, Active and Apparent Power, Frequency, Active and Apparent Energy, Power Factor, Lamp Burning Hours, Device Up Time, Enclosure Temperature, Lamp Brightness Level, Driver Temperature, LED Module Temperature, Device Boot Counter, Driver Boot Counter, Lamp On Cycles, LED Voltage, LED Current • Alarming: High/Low Voltage, High/Low Power, Low Power Factor, Day Burner, Lamp Failure, Driver Failure, Driver Communication Failure
Emissions Compliance (EMC) Safety Compliance	• FCC Part 15, Subpart B CFR 47 / CISPR 11 • IEC 60950-1
Environmental	• Operating temperature range: -40 °C to +70 °C • Humidity: 95% RH, non-condensing • Storage Temperature: -40 °C to +85 °C
Physical	• IP rating: IP 66, when fitted • Weight: 150 g • Dimensions: 86 x 84 (107 w/fixing flanges) x 50mm (W x L x H)
Network	**Radio-Frequency:** • 865-880 MHz - Europe • 902-928 MHz - North America • 902-907 MHz / 915-928 MHz- Brazil • 915-928 MHz - Australia • 921.5-928 MHz - New Zealand • Approvals: ETSI EN 300 220-1, FCC 15.247, Industry Canada RSS-210, ANATEL, AS 4268/ ACMA, NZS 4268/GURL **RF Communications:** • Data Rate: up to 300 kbps mesh networking • Automatic data routing with self-configuration, auto- healing & redundant uplinks • Spreading Technique: FHSS (Frequency Hopping), GFSK • Transmit Power: 1 W • Emission Designator: 250KF1D Receiver Sensitivity: -98 dBm for 10% PER **Protocols/Security:** • Addressing: IPv6 • Protocol: IEEE 802.15.4g (WI- SUN Certified) • Security: Secure Hash Algorithm 256-bit (SHA-256) and RAS-1024 or ECC-256 • Encryption: Advanced Encryption Standard (AES-128 or AES-256) • Authentication: ECDSA & RSA Signatures • Key Storage: Secure NVRAM with tamper detection and key erasure
Certifications	Itron Network Certified D4i Certified TALQ Certified
Installation	The UN120 internal node can be installed inside a lighting fixture or column. It possesses an external antenna that has to be routed to the outside of the fixture or column through a Ø12mm hole

All specifications subject to change without notice
*Warranty subject to **obiWAN** Terms & Conditions

About **obiWAN®**

For smart technology to truly benefit those that live in our cities, townsand boroughs, we believe that Local Authorities need to be at the heartof the revolution. At **obiWAN**, we want to give our local councils and their contractors the knowledge and tools to deliver a scalable, future-proofed Smart City strategy.

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