UN320

DC Zhaga Itron Mesh outdoor lighting controller

Product description

The **urban**node® DC Zhaga UN320 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

- D4i certified
- Extremely Low Power consumption
- Improved safety from the usage of an extra-low voltage power supply (24VDC)
- With the onboard Itron communications card, it provides a robust and secure full, two-way wireless communication in the open IPv6 Itron network, between all compatible Smart City Devices and the open Streetlight Vision Central Management System
- Accurate energy and electrical parameters metering suitable for supporting utility billing
- Automatic identification of all lamp failures reducing on-site activities
- It runs onboard astronomical clock and lighting schedules with dimming profiles
- Default Auto-photocell mode prevents day burning
- Digital signal Input for connection of a motion sensor
- Motion detection ready for Dynamic Lighting Scenario
- Over-the-air firmware upgrades
- Very high reliability, with 10 years warranty from factory
- Asset Management oriented, extended control and data exchange with the new D4i drivers
- The mechanical configuration for installation mounting is external Zhaga Book 18 standard push-and-twist lock socket

Options

- On-board GPS Option for self-location and commissioning

Typical applications

Outdoor installations: streets, roads and highways, residential areas, road intersections, plazas, parks, outdoor industrial and logistics areas, parking lots, bridges, etc.

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Technical Data

Input

Supply voltage:	24VDC
Power consumption:	Average <0.7W

Interfaces

Luminaire:	DALI-2 according to IEC 62386 standard, compliant with D4i, up to 4 Drivers, individually addressed
Digital input:	Max. 24VDC, 20mA

(Option) Onboard GPS	Automatic and precise self-location and commissioning of the smart device. Standalone GPS, acquisition Sensitivity -130dBm
Motion Detection	Input Ready for Dynamic Lighting Scenario
Metering	Accuracy as per EN50470 or ANSI C136.52 Metered parameters: Voltage, Current, Active and Apparent Power, Frequency, Active and Apparent, Energy, Power Factor, Lamp Burning Hours, Device Up Time, Enclosure Temperature, Ambient Light Level, 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, Current and Power, Low Power Factor, Day Burner, Lamp Failure, Driver Communication Failure, Loss of Mains Power

Environmental

Operating temperature range:	-40 °C to +70 °C
Humidity:	95% RH, non-condensing
Storage temperature:	-40 °C to +85 °C

Mechanical

Dimensions:	H43mm (1.69") x D80mm (3.15")
Weight:	125g
Degree of protection:	IP66, when fitted

Housing

Base	PBT, light grey
Cap:	PC, transparent smoke grey
Thermoplastic rating:	UL 94V-0 and UL UV-f1

Mounting type	Zhaga Book 18 receptacle
Warranty[1]	10 years
Reliability data	>646 FIT (@25°C, FIDES 2009)

Itron 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 300kbps mesh networking, Automatic data routing with self-configuration, auto- healing & redundant uplinks, Spreading Technique: FHSS (Frequency Hopping), GFSK, Transmit Power: up to 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
Approval marks	CE UKCA RoHS cULus FC

Standards

Safety:	IEC 60950-1 / IEC 60950-22
Electromagnetic compatibility:	FCC Part 15, Subpart B CFR 47 / CISPR 11

Installation	Can be installed on the top or bottom of a luminaire connected to a Zhaga B18 twist-lock socket

(1) Warranty subject to obiWAN Terms & Conditions