

## Urbana 4G Gateway



### Born to be smart

Urbana Gateway is a Plug&Play device for smart city applications. The device incorporates multifunctional interfaces which are able to connect a wide range of devices to Urbana IoT Platform. Urbana Gateway is a plug-and-play device for integrating any sensor and actuator into Urbana IoT Platform.

### Connect any sensor and actuator using world class technologies

The device deploys LoRa™ radio technology for last mile communication. This innovative low-power and long-range technology is used by the local controller for communicating with Urbana Lamps. It can operate on 868/915 MHz frequencies with coverage radius up to 5 Km for indoor scenarios and up to 15 Km for outdoor. LoRa technology provides the highest performances for radio communication in terms of reliability, scalability and obstacles penetration with low power consumption. The maximum power consumption is 10 dBm with 153 dB of link budget and high sensitivity of -148 dBm.

### Multi standard device

Connectivity has never been so simple. Thanks to the several interfaces used into Urbana Gateway, you can easily connect your IoT solutions in a while.

### Real-time optimization through Urbana IoT Platform.

All supervised devices can be controller in real-time.

## TECHNICAL SPECIFICATIONS

### Mechanical

Housing	Solid case
Material	Aluminium
Dimensions	233mm x 300mm x 87mm
Mounting diameter	50 - 70mm

### Electrical

Input Voltage	100~240 VAC, 50/60 Hz
Input Current (typ. @ 230Vac)	70 mA
Input power (max)	5 W
Insulation class	II

### Environmental

Operating Temperature	-40/+70 °C
Storage Temperature	-50/+80 °C
Operating Relative Humidity (max)	100%
Protection	IP55 - IP66
Certification	CE, RoHS

### Ethernet

Version	10/100M with RJ45 water-proof socket
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### Cellular

Frequency bands	FDD LTE: B1/B3/B8 TDD LTE: B38/B39/B40/B41 TDSCDMA: B34/B39 EVDO/CDMA: BC0 WCDMA: B1/B8 GSM: 900/1800MHz
LTE Version	3GPP E-UTRA Release 11
Bandwidth	1.4/3/5/10/15/20MHz
Antenna	DL MIMO 2x2, supports Rx-diversity

\* Optional

Urbana products are continuously evolving. Urbana reserves the right to change technical and formal specifications without any public advice.

## TECHNICAL SPECIFICATIONS

Data rates	LTE	LTE-FDD Max 150Mbps (DL) Max 50Mbps (UL) LTE-TDD Max 61Mbps(DL) Max 18Mbps (UL)
	DC-HSPA+	Max 42Mbps(DL) Max 11Mbps(UL)
	WCDMA	Max 384Kbps(DL) Max 384Kbps(UL)
	TD-SCDMA	Max 4.2Mbps (DL) Max 2.2Mbps (UL)
	EDGE	Max.236.8 Kbps (DL)/ Max.236.8 Kbps (UL)
	GPRS	Max.85.6 Kbps (DL)/ Max.85.6 Kbps (UL)

### Wi-Fi\*

Version	2.4G, IEEE 802.11b/g/n
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### Bluetooth\*

Version	BT2.1+EDR/3.0/4.1LE
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### LoRaWAN™ interface

Frequency	868/915 MHz
Modulation	LoRaWAN™
Sensitivity	-142.5 dBm
Max. output power	+20 dBm
Data rate	< 20 kbps
Transmission current	276 mA
Receive current	14.5 mA

### GNSS\*

Version	GPS/GLONASS/BeiDou
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### Configuration

Plug&Play using Urbana IoT Platform

## TECHNICAL SPECIFICATIONS

### MCU

1 GHz ARM®Cortex™A8  
SDRAM 512 DDR3L 800 MHz  
eMMC 4GB

### Firmware Upgrade

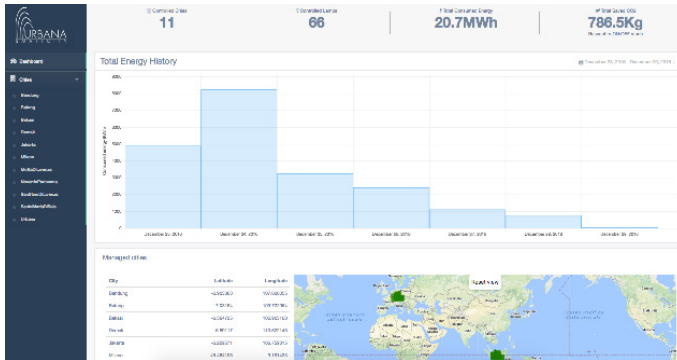
Over-The-Air (OTA)  
USB 2.0 (Return to base)

## URBANA IoT PLATFORM

Urbana Gateway is the enabler of Urbana IoT Platform, a platform that integrates lighting service with a lot of Smart City services like video surveillance, environmental sensors, traffic management, etc.

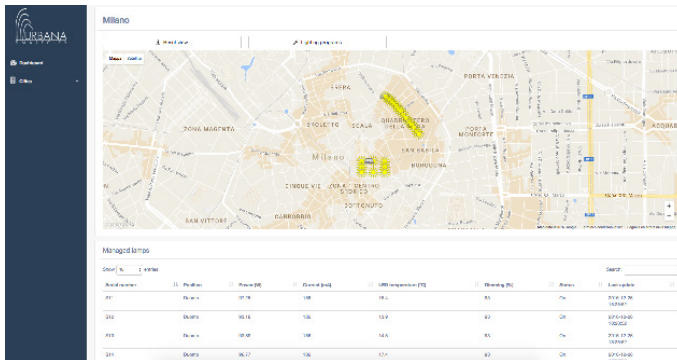
The device needs Internet connection.

Urbana gateway is a plug-and-play device. Just need to power it on.



Secure cloud access to city management system

Precise geo-location of each single device



On demand statistics and control of system efficiency

System performance and diagnostic values always available



GATEWAY



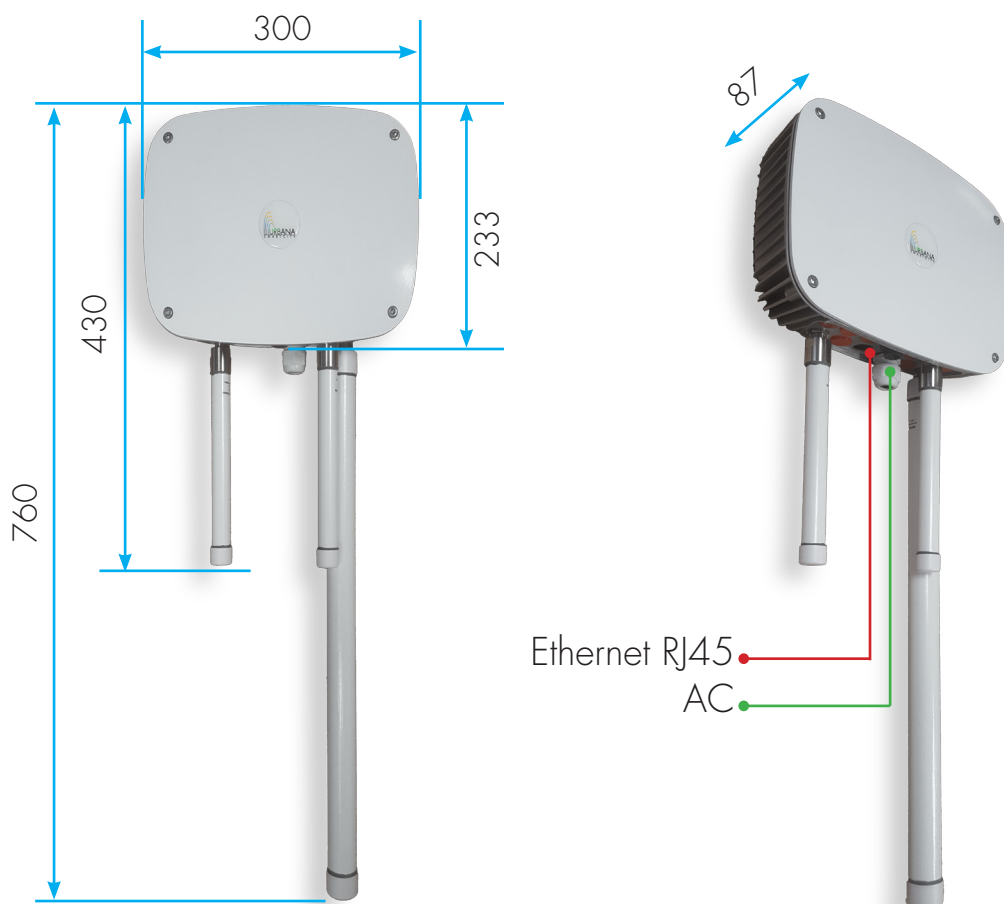
IoT PLATFORM

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## DIMENSIONS



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## PRODUCT CODE

Products are identified by the following notation.

PRODUCT	FREQUENCY
GW	868: 863-870 MHz 915: 902-928 MHz

ex. **GW868**