v. 1.0.0
DATASHEET
SMART PLC 01
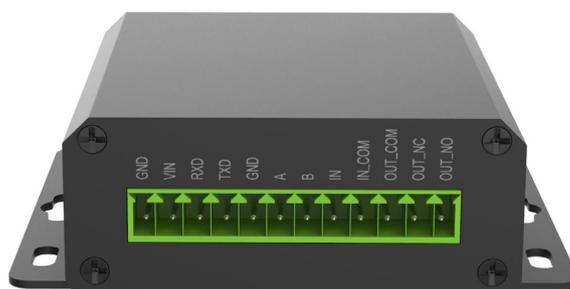
Born to be smart

Developed specifically for industrial use, Urbana Smart PLC 01 is a local control module that offers different I/O interfaces like digital inputs and relay outputs. This device support multiple trigger conditions and actions which can work without network. Urbana Smart PLC 01 is designed to be easily integrated into existing applications, is robust thanks to the metal case and works from -40°C to + 70°C.

Cutting-edge technology for network connectivity.

The device uses LoRaWAN® radio technology for last mile communication. It operates according to the LoRaWAN® 1.0.2 standard with a coverage range of up to 5 km for indoor scenarios and up to 15 km for outdoor settings. LoRaWAN® technology provides the best performance for radio communication in terms of reliability, scalability and obstacle penetration with low power consumption.

Competitive advantage

SMART PLC 01 offers fast time to market and ease of integration for remote control and automation applications even in the absence of connectivity.

Through the Urbana IoT Platform it is possible to define remote triggers and actions in addition to those defined locally in the device through the simple and intuitive configuration software. Locally configured triggers and actions are useful for critical applications that require execution even in absence of connectivity.

DEVICE DIMENSION

60± 0.1 mm

60± 0.1 mm

24 ± 0.1 mm

109 mm

20 mm

10 mm

79 mm

24 ± 0.1 mm

60± 0.1 mm

79 mm
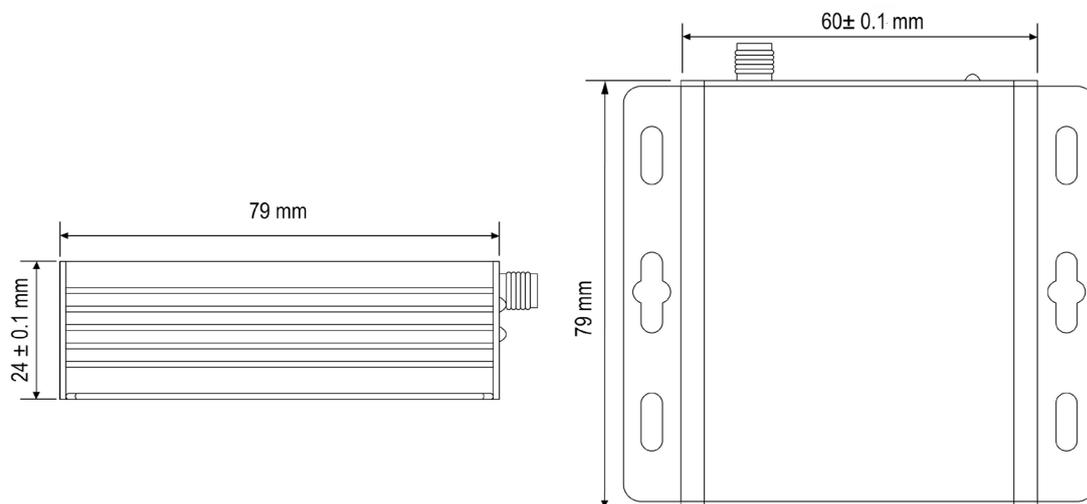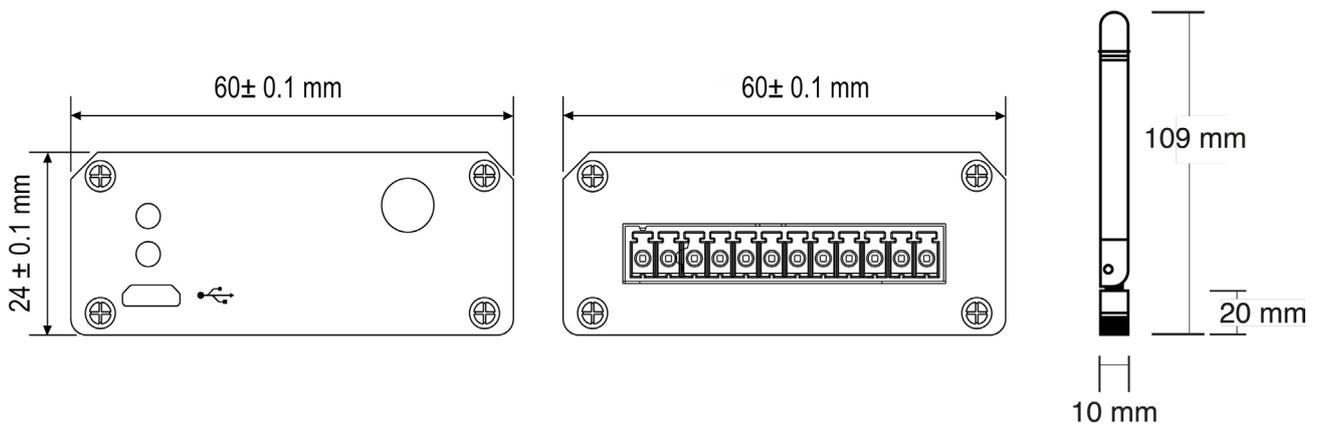
TECHNICAL SPECIFICATION

POWER

Connector:	3.5mm Terminal Block
Voltage Input:	5-24 VDC

IO

Digital Input:	2x Opto-isolated Digital Inputs, 3-24VDC Voltage
Digital Output:	2x Spot relay, 3A DC (Max: 30V) or 3A DC or (Max: 250V)

OTHERS

Configuration Port:	1 × Micro USB (for device configuration)
LED Indicators:	1 × System, 1 × ACT
Built-in:	Watchdog, Timer

PHYSICAL CARATHERISTICS

IP Rating:	IP30
Operating Temperature:	-40°C to +70°C (-40°F to +158°F)
Relative Humidity:	0% to 95% (non-condensing) at 25°C/ 77°F
Dimension:	79 × 60 × 24 mm (3.11 × 2.36 × 0.94 in)
Mounting:	Desktop, Wall or Rack Mounting

LORA® INTERFACE

Connector:	1 × 50 Ω SMA (Center PIN: SMA Female)
Frequency Band:	CN470/ EU868/ IN865/ RU864/ US915/ AU 915/ AS923/ KR923
Sensitivity:	-147dBm @300bps
Output Power:	16dBm(868)/ 20dBm(915)/ 19dBm(470)
Working Mode:	OTAA/ABP Class C

URBANA
IoT PLATFORM

Urbana platform is designed to provide end-to-end IoT solutions from hardware to software. The core structure of the platform is based on a scalable distributed and containerised infrastructure maintaining the requirements of clients to scale up whenever needed. The tech stack used in Urbana allows us to have no restriction based on number of devices, features, users and availability. With use of these highly scalable and available databases, Urbana IoT Platform is able to provide advanced reporting and fallback mechanism to provide high level of reliability. One of the most important components of the Urbana IoT Platform is the MQTT broker (server). The MQTT layer is the gate that connects the cloud-based part of the infrastructure to the local field network of devices. It plays a critical role both in terms of security and scalability but also in terms of interoperability. Urbana infrastructure can interface with any device compliant with LoRaWAN® network protocol as standardized by the LoRa® Alliance. Urbana smart solutions, being an end-to-end provider, have in-house LoRaWAN® gateways readily for the clients if needed, which are Plug&Play compliant with all the Urbana devices.

| Field Device | Network | Platform | Application |
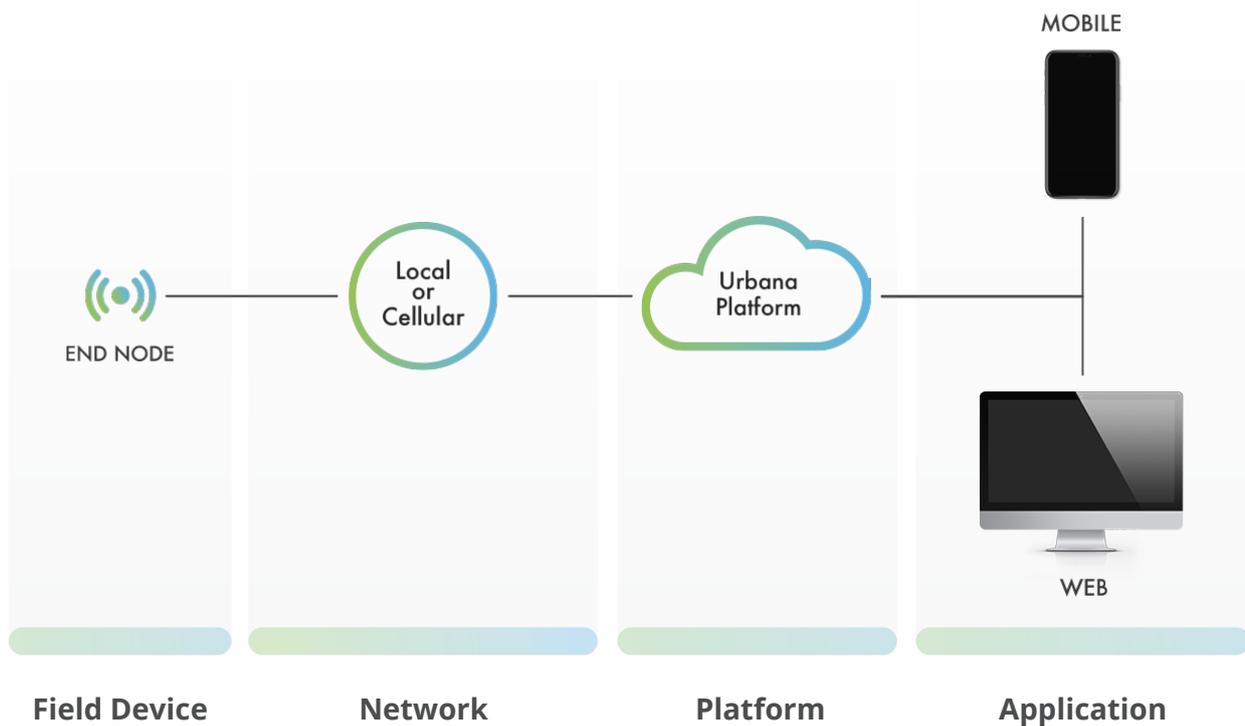
Smart PLC 01
Datasheet

CONTACT US

info@urbanasmart.com

urbanasmart.com

EUROPE

Italy
Via Bruno Maderna 7
30174 Mestre
Venice - Italy
Tel. +39 041 2689294

ASIA

Singapore
6 Shenton Way # 22-00 OUE
Downtown 068809
Tel : (+65) 6562255055
Fax : (+65) 6562255303

urbana
SMART SOLUTIONS