

Gateway IoT

The Gateway is a device that allows the integration of IoT controller focused on the city managers. With a simple connection to Ethernet, Wi-Fi, 3G/4G (or NB-IoT optionally), you can manage and configure these devices. These devices work autonomously and are synchronized with our Web Cloud platform and/or other third-party applications.



Benefits

for your City

- Energy savings
- Maintenance cost reduction
- Remote management and monitoring
- ✓ Wireless platform for Smart Cities



Main applications



Smart metering

Telemetry for water, gas and energy



Smart cities

Streetlights controllers and parking management



Smart building

Alarm systems, HVAC, access control



Agriculture and environment

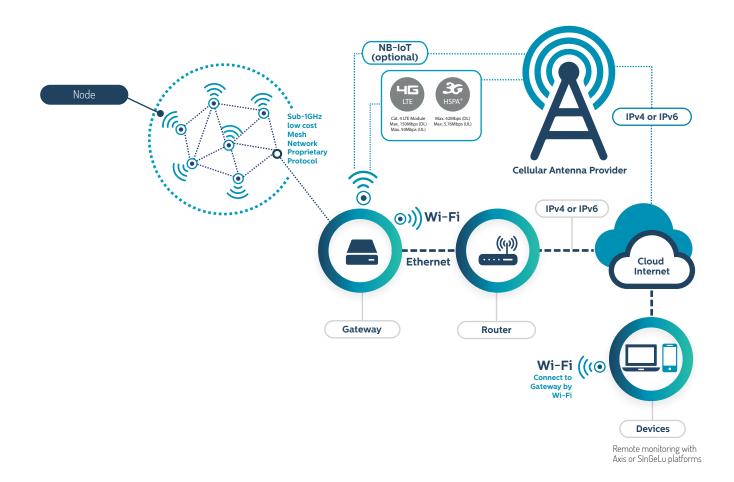
Land and environment monitoring



To interconnect the dots

The Gateway provides Sub-1Ghz proprietary mesh protocols connectivity (and full-duplex NB-IoT connectivity, optionally)

Users can also connect to the Gateway through Wi-Fi with their device and get access to the platform or consult the platform externally by a link.



key features

- Remote control and real-time monitoring of the key parameters: data management, data aggregation and data analysis.
- ✓ Plug and play installation, just by plugging new end-devices to our network.
- ✓ Flexible solution and easy interaction with different networks topologies : Star, Ring and Mesh.
- ✓ IoT interfaces: Sub-1Ghz (and NarrowBand IoT, optional).
- ✓ Secure communication is provided by compatible implementations with the standard Internet Protocol Security (IPSec) protocol suite and the Internet Key Exchange Protocol version 2 (IKEv2), which enable highly secure end-to-end communication.
- ✓ Open Interfaces for third-party compatibility (API) and customization.
- ✓ Ability to integrate/communicate with over 150 points of light.

Hardware technical specifications

CPU Unit	
Processor	Quad Core 1.2GHz
CPU architecture	64 Bit
RAM Memory	2GB RAM DDR3
Storage Memory	MicroSD card slot
RTCC	Real Time Clock Calendar with battery backup
System	Linux Debian based and Huawei Lite OS, allowing an plug and play integration with NB-IoT and Huawei IOT platform

Interfaces	
Ethernet	RJ45 Ethernet 10/100/1000 Mbps
Bluetooth	Bluetooth V4.0 with integrated Class 1.5 PA
Wi-Fi	IEEE 802.11 b/g/n standard (up to 72.2Mbps)
Misc	Others: FOTA (Firmware Over-The-Air) Firmware update via USB/UART Embedded TCP/IP stack Support AT commands 3GPP TS 27.007 and 27.005 Huawei extended AT command
Cellular Network Interface	Worldwide LTE, UMTS/HSPA+ and GSM/GPRS/EDGE coverage LTE Version 3GPP E-UTRA Release 10
	LTE-FDD Max. 150Mbps (DL) Max. 50Mbps (UL) LTE-TDD Max. 150Mbps (DL) Max. 50Mbps (UL)
	DC-HSPA+ Max. 42Mbps (DL) Max. 5.76Mbps (UL)
	UMTS Max. 384Kbps (DL) Max. 384Kbps (UL)
	TD-SCDMA Max. 4.2Mbps (DL) Max. 2.2Mbps (UL)
	EDGE Max. 236.8Kbps (DL) Max. 236.8Kbps (UL)
	GPRS Max. 85.6Kbps (DL) Max. 85.6Kbps (UL)
	Backward-compatible with existing EDGE and GSM/GPRS networks, which ensures that it can be connected even in remote areas devoid of 4G or 3G coverage
GNSS (optional)	GPS/GLONASS
USB 2.0	2 USB ports

oT Interface Communication	
Narrowband IoT (NB-IoT) (optional)	Data rate: LTE category NB1: Single-tone uplink (up to 27.2 kbps DL, 62.5 kbps, up to 62.5 Kbps UL - up to 27.2 kbps DLUL) 3GPP Release 13 FDD Band 8, 20 Europe
	SIM card slot
Sub-1Ghz ISM Communication	Frequency range: 868 / 915 MHz ISM bands
	Senstivity: -121 dBm
	Output power range: 20 dBm Max
	Data rate: 0.123 to 256 kbps
	Modulation: FSK, GFSK, and OOK
	Digital RSSI
	Mesh proprietary protocol
	1 km max, open field range

Environmental Specification	
Operating Temperature	-20°C to 70°C
Storage Temperature	-40°C to 85°C
Humidity non-condensing	10% to 90%, RH non-condensing

Electrical Specification	
Power Consumption	5 Watts typical (10W max.)
Input Voltage	110 - 230 VAC 50 - 60Hz
Electric Protection	Class II: overload, short-circuit and over-temperature protection
Electric Safety	Galvanic isolation between high-voltage and low-voltage terminals

Physical Specification	
Dimension	154 x 179,50 x 52 mm
Weight	640 g
Product Mounting	Wall or cabinet mounting









contact us

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