



GATEWAY V5

TPOLOGY: FE

Globaltronic
spreading technology

The Gateway V5 FE has the capability to integrate a network of IoT controllers and external sensors into both new and existing infrastructures. With a simple Ethernet, WiFi, 3G/4G, or NB-IoT connection, it is possible to manage and configure these devices. The Gateway V5 FE autonomously synchronizes with the cloud web platform and/or other third-party applications.

Benefits for Your City

- ✓ Energy savings
- ✓ Reduced maintenance costs
- ✓ Remote management and monitoring
- ✓ Wireless platform for Smart Cities
- ✓ Monitoring and alarm management



Principais aplicações



Smart Metering

Telemetry for water, gas, energy, and lighting, external sensors, and digital inputs



Smart cities

Public lighting controllers and parking management



Smart Buildings

Alarm systems, climate control, an access control



Agricultures and environment

Environmental monitoring



Sensors

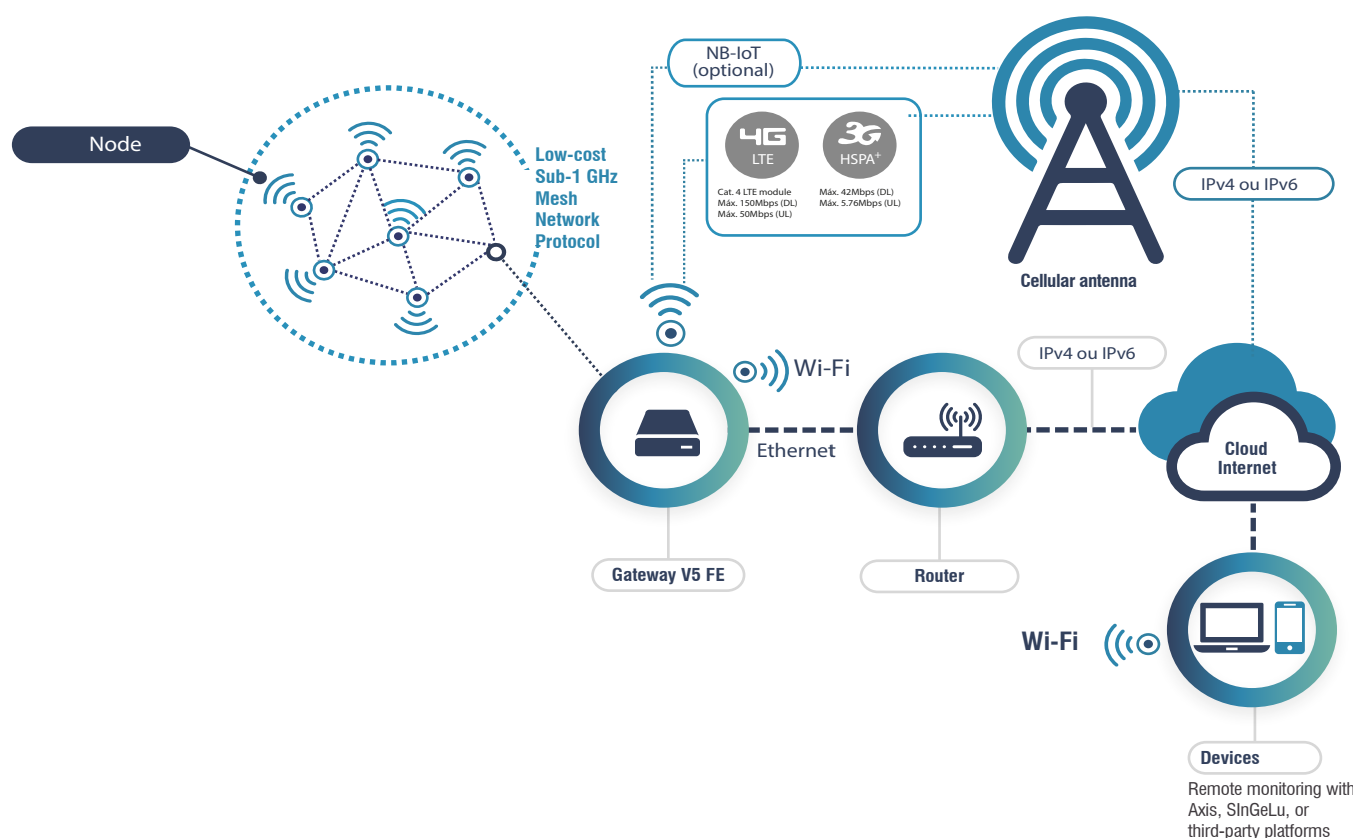
Monitoring and action on mobility sensors

version A3 | 2025 revision: 11/06/2025

To interconnect the points

The Gateway V5 FE provides Sub-1GHz mesh protocol connectivity.

Users can access the Gateway via Wi-Fi, 3G/4G, or Ethernet using their device and use the internal platform, or consult it externally through a link.



Main features

- ✓ Potential-free relay outputs
- ✓ Remote control and real-time monitoring of key parameters: management, data addition, and analysis.
- ✓ Plug-and-play installation by simply connecting new end devices to our network.
- ✓ Flexible solution with easy interaction across different network topologies: Star, Ring, Mesh.
- ✓ IoT interfaces: Sub-1GHz, WiFi, BLE (and NarrowBand IoT, optional).
- ✓ Secure communication is provided through implementations compatible with the standard IPsec (Internet Protocol Security) protocol suite and IKEv2 (Internet Key Exchange Protocol version 2), enabling highly secure end-to-end communication.
- ✓ Open interfaces for third-party compatibility (API) and customization. TALQ certification.
- ✓ Capability to integrate/communicate with over 150 lighting points.
- ✓ Reading of analog and digital inputs.
- ✓ RS485 communication for external measurement and control systems.
- ✓ Radio unit redundancy.

Hardware Technical Specifications

CPU

Processor	Quad Core 1.2 GHz
CPU Architecture	64 Bit
RAM Memory	2GB RAM DDR3
Storage Memory	MicroSD card slot. Internal memory 16 GB
RTCC	Real-Time Clock and Calendar with backup battery
System	Based on Linux Debian and Huawei Lite OS, allowing plug-and-play integration with the NB-IoT platform and Huawei IoT

Interfaces

Ethernet	RJ45 Ethernet 10/100/1000 Mbps
Bluetooth (opcional)	Bluetooth V4.0 com classe integrada de 1.5 PA (opção)
Wi-Fi	IEEE 802.11 b/g/n padrão (até 72.2 Mbps)
Diversos	Outros: FOTA (Firmware Over-The-Air) Atualização de firmware via USB/UART Stack TCP/IP incorporado Suporta comandos AT 3GPP TS 27.007 e comando 27.005 Huawei extended AT
Interface de rede celular	Cobertura mundial LTE, UMTS/HSPA+ e GSM/GPRS/EDGE Versão LTE 3GPP E-UTRA Release 10 LTE - LTE-FDD Máx 150Mbps (DL) Máx 50Mbps (UL) - LTE-TDD Máx 150Mbps (DL) Máx 5.76Mbps (UL) DC- HSPA+ - Máx 42Mbps (DL) Máx 50Mbps (UL) UMTS - Máx 384Kbps (DL) Máx 384Kbps (UL) TD-SCDMA - Máx 4.2Mbps (DL) Máx 2.2Mbps (UL) EDGE - Máx 236.8Kbps (DL) Máx 236.8Kbps (UL) GPRS - Máx 85.6Kbps (DL) Máx 85.6Kbps (UL) Compatibilidade com versões anteriores das redes EDGE e GSM/GPRS existentes, o que garante que ele possa ser conectado mesmo em áreas remotas sem cobertura 4G ou 3G.
GNSS (opcional)	GPS/GLONASS

Electrical specifications

Power consumption	Typically 5 Watts (10W max.)
Input voltage	Input voltage: 110–230 VAC $\pm 10\%$, 50/60 Hz $\pm 5\%$, and 24 VDC in the solar version
Electrical protection	Class II: overload, short-circuit, and over-temperature protection
Electrical safety	Galvanic isolation between high and low voltage terminals

IoT communication interface

Narrowband IoT (NB-IoT) (optional)	Data Rate: LTE Category NB1: Single-tone uplink (up to 27.2 kbps DL, 62.5 kbps UL – up to 27.2 kbps DL/UL) 3GPP Release 13 FDD Band 8, 20 Europe SIM card slot
ISM Sub-1 GHz communication	Frequency range: ISM bands 868/915 MHz Sensitivity: -121 dBm Output power range: 20 dBm Max Data rate: 0.123 to 256 kbps Digital RSSI Mesh protocol Maximum range: 1 km in open field

Input / output interface

Output interface	2 relay outputs
Input interface	4 analog inputs, 10-bit (max. 3.3 VDC) 5 isolated digital inputs (max. 24 VDC)

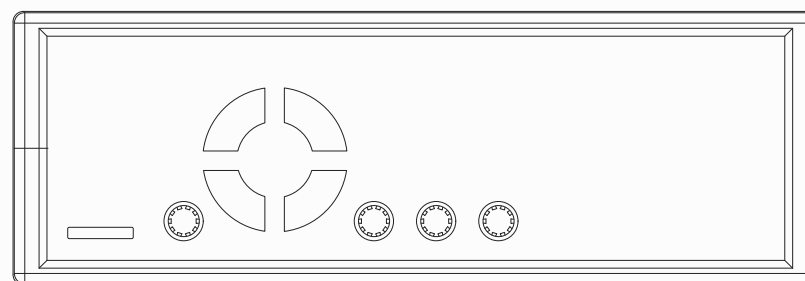
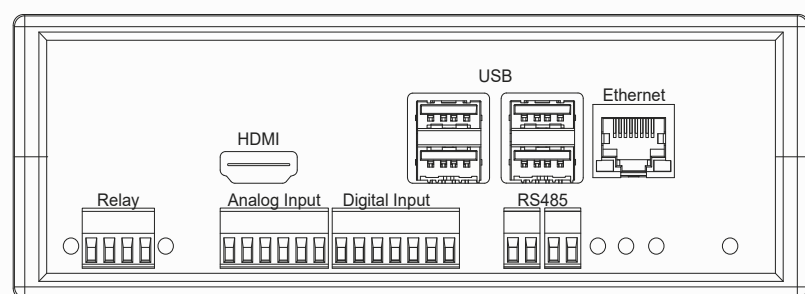
Environmental Specifications

Operating temperature	-20°C to 70°C
Storage temperature	-40°C to 85°C
Non-condensing humidity	10% to 90% RH, non-condensing

Mechanical

Dimension	154 x 179,50 x52 mm
Weight	640g
Product mounting	Wall mounting, cabinet, or external box DIN rail support

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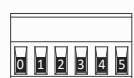


1 Relays



1 - Relay 1 NO
2 - Relay 1 NO
3 - Relay 2 NO
4 - Relay 2 NO

2 Analog Input



0 - AN1 3 - AN4
1 - AN2 4 - 5V ISO
2 - AN3 5 - GND ISO

3 Digital Input



0 - DIG1 4 - DIG5
1 - DIG2 5 - 5V ISO
2 - DIG3 6 - GND ISO
3 - DIG4

4 RS485



1 - B
2 - A

5 RS485



1 - B
2 - A

Heart Beat



ON

NET Mode



NET Status

SD Card

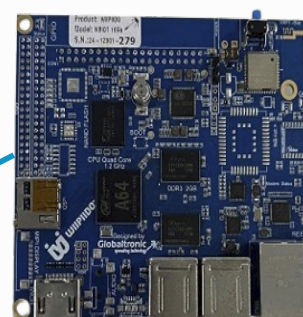
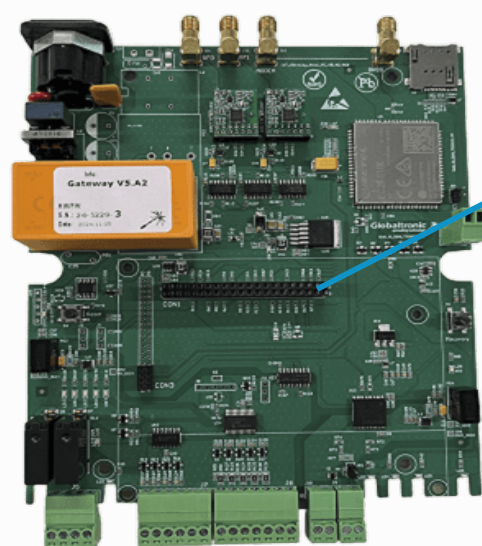
GNSS

3G/4G

RF

RF

CPU unity



Contact us and discover how this solution fits your needs!

Avenida das 2 Rodas, nº 830

Parque Empresarial do Casarão

3750-860 Borralha

Portugal

E-mail: geral@globaltronic.pt

Telephone: (+351) 234 604 112

Telephone: (+351) 234 612 687

(Call to national fixed network)

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Selective collection symbol for WEEE – "recycle the right