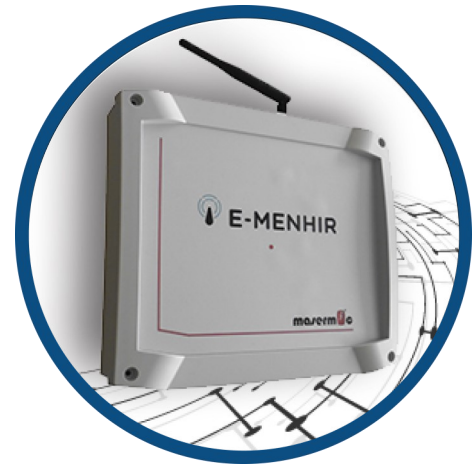




iEMENHIR



Sensing, communication and data monitoring system for Smart Cities

iEMENHIR is a gateway that centralizes and communicates relevant information for the management of public services in the Smart City.

It is supported by a network of wireless nodes and allows the use of existing infrastructure in the city.



Lighting and Energy
Management of streetlamps and energy efficiency



Security
Security cameras and presence sensors



Communications
Modular system adaptable to different scenarios



Public services
Interaction with the citizen



SENTILO
Open source platform for sensor/actuator management

OPERATION

I/O & RS485



Ethernet & WiFi



USB



NFC



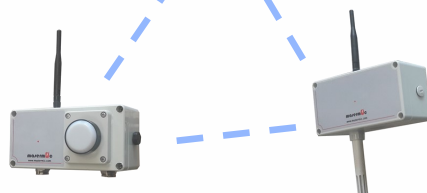
iEMENHIR Gateway



WiFi
3G



Open source platform for sensor/actuator management



iEMENHIR Nodes
Wireless Sensor Networks

KEY APPLICATIONS



Environmental monitoring



Smart public lighting



Parking management



Optimized waste collection



Surveillance applications



Interaction with the citizen

IEMENHIR GATEWAY

Enclosure	IP65 / 195x175x55mm / 670 gr.
Temp & humidity	-20°C to +60°C and 95% (external condensation)

POWER SUPPLY

Power input	100-240VAC
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INPUTS

Inputs	4 Dig. Inputs 0-7VDC + USB OTG+ pasive NFC
Ethernet	10Base-T/100Base-TX IEEE 802.3
Expansion module	MenhirBUS: RS485, 5V/1A power and digital line
GPS module	-161dBm sensitivity and ±11ns 1PPS accuracy

MEMORY

Slot for micro-SD card (up to 4GB)

COMMUNICATIONS

3G	900 / 1800 / 2100 bands
WiFi	2,4GHz 802.11 with TCP/IP stack (low consumption)
ZigBee	2,4GHz ZigBee mesh networks up to 50 nodes - 350m

PROGRAMMING AND MONITORING

Programming	Tailored configuration for each project
Monitorización	SENTELO platform for cloud based sensor and actuator management

PUSHBUTTONS AND LEDS

Leds	Display of operating status
Pushbuttons	ON/OFF and RESET

IEMENHIR NODE

IP67 160x80x55mm box (-20°C to +60°C and 95% humidity)
Powered by 3,6V—2,6Ah batteries
2 Digital or 2 Analogical Inputs + 1 Digital Output
Mesh Wireless Networks based on IEE 802.15.4 (2,4GHz band)

SENSORS / ACTUATORS

Selection of appropriate sensors and actuators for each application

SERVICES

R&D capabilities for tailor made solutions
Hardware-software development

masermic

Polígono Kurutz Gain 6A 20850 Mendara (Gipuzkoa) Spain Tel: +34 943 742 669

commercial@masermic.com

www.masermic.com

