



REMOTE MONITORING

ERMAN-NG periodically interrogates connected devices according to customizable rules and timelines.

ERMAN-NG can act as a bridge by receiving instructions encapsulated in the MQTT protocol and converting them into the protocols of the connected devices.



M2M - IoT CLOUD

ERMAN-NG monitors values and sends them to any MQTT-compliant Cloud, reducing communication costs.



DEFCONS

ERMAN-NG manages communication dynamically sending only the necessary information to the cloud.

ERMAN-NG, is equipped with a rules execution engine that allow it to change frequency and / or remote-controlled parameters according to the specific conditions of the controlled system.



ERMAN-NG • Global Network Interface

ERMAN-NG is a global intercommunication module between Ethernet networks and typical field buses for controlling local equipment (RS485, TTL-LVTTL Serial, CAN, USB).

ERMAN-NG natively implements the most known protocols in their respective environments (modbus, MQTT, OPC-UA) allowing full interoperability between them.

ERMAN-NG consente di inviare i dati ricavati dai dispositivi a cui è connesso a qualsiasi supporto di archiviazione o elaborazione dati come database, software di business management, elaboratori di reportistica, sistemi di comunicazione in generale e/o altri nodi ERMAN-NG connessi alla medesima rete.

ERMAN-NG sends collected data from the connected devices to any storage or data processing support such as databases, business management software, reporting processors, communication systems in general and / or other ERMAN-NG nodes connected to the same network.

ERMAN-NG also acts as a complete gateway between all the physical communication ports it is equipped with and through all the natively supported protocols as well as those implemented dynamically through the descriptors.

Moreover, even machines with different protocols can coexist in the same local ERMAN-NG network as this is able to switch the protocol as well as the communication parameters to be used depending on the particular device to be interrogated.

In addition, ERMAN-NG can be configured as a slave and controlled from a local device via a Modbus connection through which all ERMAN-NG functionalities to the IOT world are made available.

CONNECTIVITY – IOT

- Internet connection allowed by the Ethernet port;
- Local connection based on RS485 TTL or LVTTL
- autosense;
- USB-OTG connection for USB sticks (HOST mode) or fully dynamic virtual serial (DEVICE mode);

MODBUS GATEWAY

ERMAN-NG realizes a complete gateway between ModBus-TCP (in which it can listen in up to 10 TCP ports - in SLAVE mode) or transmit in up to 10 TCP connections - ports in MASTER mode - in any combination) and ModBus -RTU where each of the 5 serial connections is equipped (2 RS485 and 3 TTL-LVTTL serial). In addition to this, the USB connection can be configured as a virtual serial in SLAVE mode simply by connecting a USB cable to a PC port.



MicroSD

In addition to the telemetry transmission ERMAN-NG can store the data, at different times, on microSD on appropriate ".csv" files.



RS485 – MODBUS RTU

ERMAN-NG is equipped with a powerful communication engine that allows to transport the ModBus-RTU and TCP protocols in a transparent way between all the communication ports.



MQTT

ERMAN-NG is equipped with a complete set of access functions through MQTT.

This allows you to perform any kind of action on ERMAN-NG and on the monitored network of devices.



OPC-UA

ERMAN-NG is equipped with a powerful OPC-UA compliant engine that realizes a complete gateway between advanced PLCs and any device connected to ERMAN-NG.

MQTT

- Message Queue Telemetry Transport: implementation of the innovative protocol created for the Internet of Things;

OPC-UA

All devices connected and recognized by ERMAN-NG in any port can be reached in read and / or write through the OPC-UA protocol.

DEFCON

It is possible to define the query frequencies and the variables to be subjected to monitoring in a totally automatic way, and lock them to particular and well defined conditions of the system to be controlled,

MEMORY

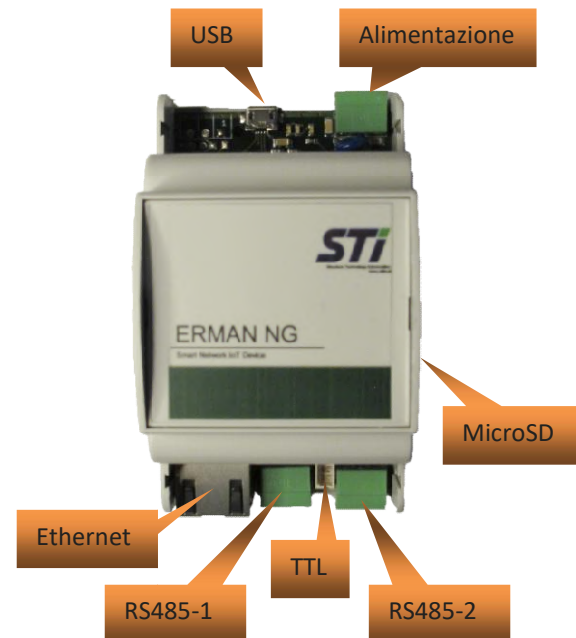
NON-VOLATILE memory for device settings; MicroSd up to 32 G, .csv files data store;

NATIVE APPLICATIONS

Dynamic WEB server for online virtual dashboards and password protected parameter configurations, FTP server and client.

AGGIORNAMENTI

- ERMAN-NG can be updated locally through the MicroSD, or remotely;
- Firmware, network to be monitored (Network), parameter map (Settings) are upgradable.



ERMAN-NG • Global Network Interface

Technical Details	
Dimensions	53 x 91 x 63 mm (3DIN)
Mounting	Open board or DIN RAIL EN50022
IP Class	IP20
Enclosure Material	Plastic
Speed	ETHERNET 100Mbps - Local 300 - 115200 baud
Internal memory	Up to 32GB MicroSD
Protocols	MQTT, OPC-UA, ModBus, internal grammar computer, HTTP, FTP
Certifications	
CE	EN61000-6-4 - EN61000-6-4
Electrical Characteristics	
Power	12-24Vdc - 12Vac (3W max) Inverse polarity protection
Environment	
Operating Temp	-20°C - 55°C