



Il successo del vostro progetto è nell'aria...

GW525

When data processing
turns into a real value

GATEWAY 4G-LTE

Internet's power and markets' globalization offer companies the possibility to sell the products all over the world, often these places are not easy to reach and the local technicians are not qualified enough to correctly accomplish the job. In these cases, an affordable price is not enough, it is necessary win the customer's trust in order to guarantee the best support service you can give him. Nowadays this means being able to organize the maintenance in a very short time but also helping the customer by optimizing his whole system.

To obtain this result is important to link the system with a device which can read and save remotely all the data. Thanks to this, you can know/see all the alarms in real time and all your data history, therefore in case of maintenance you just check all these parameters to understand the root cause of the problem thus you can reach the system with all the materials you need to repair it. This means less travel (*save the planet*), less stress, less time for all the support staff and less costs for the customer due to maintenance and machine downtime. Very usefull, reading the data history, in order to give to the customer some recommendation about their system efficiency (*save the energy*) or information about the replacement of parts subject to wear. Over time, trust and loyalty increase with a consequent increase in reputation and sales.

For these purposes FAE offer you the **GW525**, a gateway for IIoT (*Industrial Internet of Things*). This product is connected to sensor, devices, and PLC through Modbus (TCP/IP, RTU), SDI-12, I/O digital and analog. It transmits the data to a server cloud (*based on MQTT(S) protocol*) by a GSM antenna, it works separately from the physical local network and it guarantees the higher security and reliability about the data sent. Alternatively, it is possible to connect the gateway to your local network (Wi-Fi or Ethernet) with no additional costs of a SIM card. **GW525's** configuration is done via Wi-Fi or Ethernet cable. In the cloud platform through a PC or smartphone connection, you can analyze all the data collected and modify the connected device's parameters. Exceeding configurable critical thresholds allows you to be notified via e-mail or push notifications.

GW525 can be used by R&D and quality office to receive and check data from either prototype systems or sold machines, allowing to collect tests results and system failure statistics in a faster way. At the same time this gives the possibility to unlock potential income from planned preventative maintenance.



The "Energy saving" function is also available to limit consumption between transmitting data to the cloud.

If you are not interested in the cloud functions, it is possible to use the GW525 to send SMS when the thresholds of modbus registers are exceeded or when the digital inputs are opened/closed. An address book with 10 contacts numbers, allow you to manage sending alerts to several people at the same time.

Technical features in the various versions:

- Power supply 7..30Vdc with backup battery for give alert about power failure.
- 4G LTE Modem (Cat-M, Cat-NB) with external antenna (SMA connector) which can be extended outside of the electric panel
- Internet connection through SIM/Wi-Fi/Ethernet
- Isolated RJ45 for Modbus TCP or LAN
- Not isolated RS485 connector on 3 terminals (0V, T+, T-) for Modbus RTU
- Not isolated serial port for SDI-12
- Compatible with Bluetooth and Wi-Fi functions
- Micro SIM slot
- Limited memory to store data in case of short internet connection failures
- Web server Wi-Fi/Ethernet for configuring the device via smartphone o PC
- Download/upload registers configuration in CSV file
- 2 digital inputs
- 2 C-NO contact relays (2A-250Vac / 2A-30Vdc)
- 1 analog input 4.20mA
- Spring clamps connectors
- Operating temperature: -30T55°C
- Storage temperature: -40T80°C
- 5 module enclosure in PC/ABS self-extinguishing UL94V0, to mount inside the electrical panel on the DIN rail (EN60715), dimensions 88W x 91H x 33D.

Product code:

	1	2	3	4
Model	GW525	E	MB	XXX
	E = FAE ERMES cloud; none = other applications			
	MB = Modbus		S = SDI-12	
Options:	I = 2 digital inputs; O = 2 relay (SPST NO); A = 1 analog input 4..20mA			

Datasheet:

Code	GW525
Power supply	7..30Vdc, electrical absorption <3W (absorption 0,3W during Energy Saving mode)
Internal power supply	Super capacity for short power failures
Modem	4G (LTE-Cat-M/Cat-NB), GPRS/EDGE Cat-M: B1/B2/B3/B4/B5/B8/B12/B13/B18 /B19/B20/B25/B26/B27/B28/B66/B85 Cat-NB: B1/B2/B3/B5/B8/B12/B13/B14/B18/ B19/B20/B25/B26/B28/B66/B71/B85 GSM: 850/900/1800/1900MHz
Antenna connector	SMA female for GSM external antenna
Internet connections	SIM: slot Micro SIM (push/pull) Wi-Fi: 802.11, b/n/g Ethernet/WAN
Memory	8Mb data memory for short internet connection failures
Communication ports MB version (Modbus)	1 x RJ45 Ethernet port (10/100Mbit/s) for Modbus TCP 1 x RS-485 from 9.6 kbit/s to 38.4 kbit/s for Modbus RTU
Communication ports S version (SDI12)	1 serial SDI-12 port 1 Ethernet RJ45 port (10/100Mbit/s)
Cloud protocol	MQTT(S)
Datalogger cloud	Sampling period, individually configurable for 100 registers: Fixed for all registers / Custom period / On value change
SMS (short message service)	YES
Max. peripherals	10
Device's configuration	Web server (WiFi/Ethernet)
Digital inputs	2 NPN (dry contact)
Analog input	1x 4..20mA (Ri=100 Ω)
Digital outputs	2 SPST NO relay (2A-250Vac / 2A-30Vdc) cable max section 1.5mmq
Modbus I/O Expandability	YES
LED signal	Modbus/SDI-12, status led
Operating temperature	-30°C to +50°C
Storage temperature	-40°C to +80°C
Moisture	60±20% RH non-condensing
Dimensions (WxHxD) and weight	88 x 91 x 33mm, 130gr
Enclosure/IP grade	5 modules enclosure for indoor panel in PC/ABS self-extinguishing UL94-V0, IP10
Assembly	In vertical position on DIN rail 35mm (EN60715)
Wiring	Spring clamps terminals, max section 0,75mmq
Isolation	3kV between digital outputs and other ports
Certifications	EN301489-1 / EN301489-17 / EN301489-52 EN 61000-6-2 / EN 61000-6-3

