MODBUS

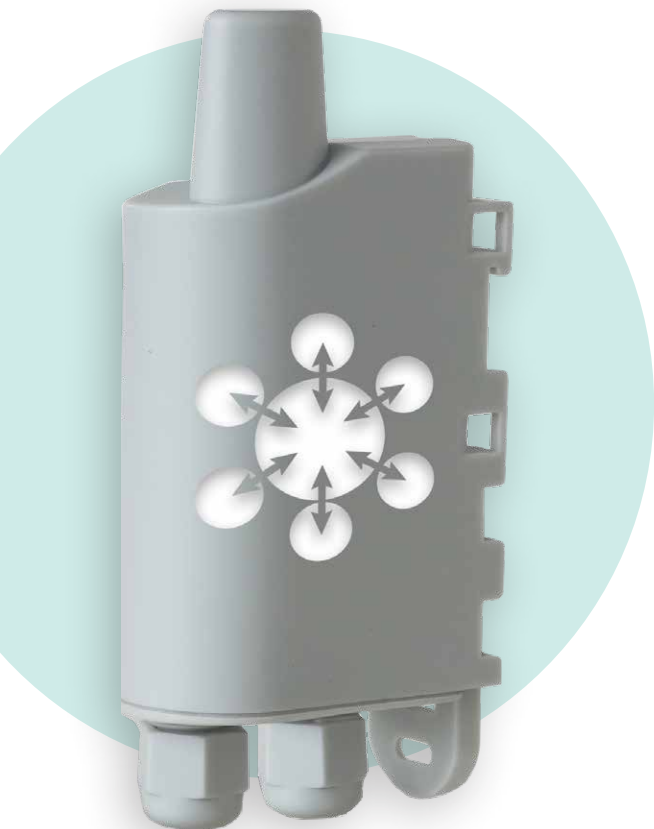## Query, write and read one or more registers on one or more Modbus slaves.

ALERT

Report faults and alerts from MODBUS slaves :
- · Min/max thresholds

MEASURE

Provide feedback about measuring data from Modbus slaves

ACT

- · Read a slave's registers from the network
- · Write to a slave's registry from the network

Additional features:
- · **Periodic/event transmission** (up to 6 frames with different frequencies)
- · **Slave management:** read and write
- · **Error/fault management:** product error warning, configuration error
- · **Alarm repetition** in case of persistent event
- · **Indicator lights** for installation assistance
- · **Network Quality Test at start-up** (LoRaWAN)

Make your thermal energy meters communicate.

Broadcast information on PLC.

TECHNICAL SPECIFICATIONS

LoRaWAN ARF8240AA | Sigfox ARF8240CA

Mechanical specifications

Weight	97 g
Dimensions	105 x 50 x 27 mm
Enclosure	IP67, EMERGE™ PC 8731HH grey resin (casing), EMERGE™ PC 8430-15 transparent resin (sole)
Mounting	DIN Rail, Tube, Wall, Collar
Cable length	2 cable of 6 wires (70 cm + 10 stripped wire)
Modbus Protocol	Remote Terminal Unit (RTU)

Operating conditions

Temperature	-25°C / +70°C
Humidity	0 to 85% RH (non-condensing)

Device Power Supply

Alimentation	External supply 6-30V continuous
Slave supply management	Monitor the supply of the slave
Current max returned to the sensor	500 mA

Device configuration

Local device configuration	IoT Configurator
Test Read and Write into slaves	Advanced mode of the IoT Configuration
Configuration and firmware up-date from the air	KARE+ compatible
Remote device configuration	Downlink via the network or via the KARE platform
Security	PIN/PUK Code protection

Radio/Wireless

Supported regions	LoRaWAN EU863-870 / Sigfox RC1
Wireless Security	AES-128 data encryption (LoRaWAN only)
Class	LoRaWAN: Class A or C	Sigfox: Class 0
Supported LoRaWAN features	OTAA, ABP, ADR, adaptive channel setup
RF transmit power	14 dBm
Sensitivity	-137 dBm LoRaWAN @SF12 -124 dBm Sigfox

Regulations and certifications

Standard	Directive 2014/53/UE (RED)

RS232 Link

Signals	RX, TX, Ground (RTC and CTS are not handled)
Voltage of inputs/outputs	+/- 5V typ, +/- 15V max

RS485 Link

Signals	TX-, RX-, RX+; TX+, Ground
Voltages on inputs/outputs	+/- 1.5V typ, 3V differential
Polarization resistors	560 Ohms
Termination resistor	120 Ohms