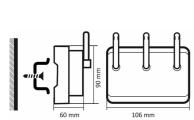
KET-RTU-310



APPLICATIONS	
monitoring consumption	
Building management system	
Smart City	
Thermoregulation	



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Advanced X-Monitor gateway with 4G/LTE-M modem and Wi-Fi™

- 4G/LTE-M, Wi-Fi™ and X-Monitor (X-MP) connectivity
- Bidirectional RS485 port
- ModBUS TCP/IP Server
- Native integration with X-Platform

The KET-RTU-310 Gateway, the central core of the X-Monitor network, stands out for its advanced functions and large memory capacity, key elements for efficient data management.

Connection flexibility is ensured by the integrated 4G/LTE-M modems (optional) and Wi-Fi™ support, eliminating the

need for a LAN connection and expanding installation possibilities even in environments without cabling. Thanks to the Linux operating system, the gateway utilizes standard libraries to ensure a high level of security and reliability in data transmission.

The installation and management of sensor networks, even complex ones, are extremely simple thanks to the included X-Manager software and the intuitive integrated web interfaces. These allow for quick configuration of the necessary parameters and real-time monitoring of acquired measurements

In addition to the ability to export data to external platforms like X-Platform, the device offers a large internal SD memory capable of storing data for periods exceeding three months, ensuring operational continuity and the availability of

The integrated RS485 port supports both Master RTU and Slave RTU modes, offering dual functionality: direct connection of devices to the gateway or access to the registers of connected devices via an external Master RTU. The **ModBUS TCP/IP server** incorporated in the KET-RTU-310 facilitates the integration of the **X-Monitor**network with SCADA systems, PLCs (programmable logic controllers), and HMI (human-machine interface) systems, expanding data control and visualization possibilities.

Interoperability with proprietary data collection systems is further enhanced by support for data transmission via REST / JSON web services and the IEC 60870-5-104 protocol, ensuring flexible and standardized communication.

TECHNICAL FEATURES		
GENERAL SPECIFICATIONS	Protection Range: Front: IP40; Screw Terminals: IP20 Operative Temperature: -20 ÷ +70 °C Storage Temperature: -20 ÷ +85 °C Relative Humidity: MAX 80% not condensing	
CASE	Dimensions: 106 x 90 x 60 mm (W x H x D) Mounting: Wall mounting or on DIN rail Required DIN modules: 6 DIN modules Electric Board Type: Industrial or switchboard Material: Blend PC/ABS self extinguishing UL94-VO	
POWER SUPPLY	Supply Voltage: 100 ÷ 240 VAC (50-60 Hz) or 12 ÷ 24 VDC, 12 ÷ 20 VAC Consumption: 6 W @ 100 ÷ 240 VAC / 6 W @ 12 ÷ 24 V AC/DC Connectors types: Removable screw terminals	
UPS	Battery Type: Internal lithium 1 Ah Approximate Battery Life:	
DATALOGGER FUNCTION	Memory Type: Flash up to 128GB internal microSD card not accessible, 1GB RAM DDR3 Data Storage Capacity: For a period of over 3 months	
PROCESSORS	Processor Type: Allwinner A20 CPU for the Linux operating system	
RS485 INTERFACE	Channels: Supported Protocols: Master or slave ModBUS RTU Communication Rate: Isolation: Connectors types: Removable screw terminals	
ETHERNET INTERFACE	Supported Protocols: 10/100/1000 Base-T Communication Rate: Connectors types: RJ45	
ANALOG OUTPUTS	Output Type: Video: HDMI output for OEM use; Touch: a dedicated USB for OEM use; 2 USB ports for FW upgrade and data transfer	
RADIO MODULE	Supported Protocols: X-Monitor Protocol (X-MP) / IEEE 802.15.4 Radio Frequency: 2.4 GHz ISM Band Output Power: +3 - +20 dBm Sensitivity: -104 dBm Antenna Type: RPSMA connector, 90° antenna supplied Max Distance (Free Air): Over 1000 m	
MODEM	Supported Protocols: 4G/LTE-M Radio Frequency: Antenna Type: SMA connector SIM Type: Mini-SIM	
WI-FI	Supported Protocols: IEEE 802.11b/g/n standards: 64/128-bit WEP, TKIP, AES, WPA, WPA2 Radio Frequency: 2.4 GHz ISM Band Antenna Type: RPSMA connector, 90° antenna supplied	
FUNCTIONALITY	Radio Signal Indicator: Output Power Adjustment: Firmware Upgrade: Remotely User menu: Support for public environment:	
INTEGRATED FUNCTIONS	Services: Gateway function between X-Monitor™ network to Wi-Fi™, Ethernet and cellular; ZigBee™ network coordinator; Server ModBUS TCP/IP; ModBUS RTU master and slave on RS485 port	
CERTIFICATIONS	Referends Standard: 2014/35/UE, 2014/30/UE, 2014/53/EU, 2011/65/UE Approvals: CE Security: EN 61000-6-2 / -6-3 / -4-2 / -4-3 / -4-4 / -4-5 / -4-6 / -4-11; EN55022 (cl. B), EN55016-2-1 / -2-3 Metrology:	