kerberos



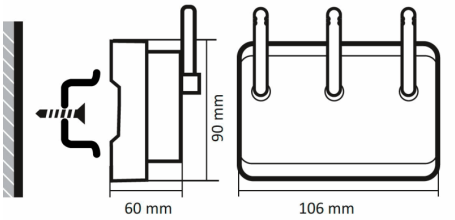
KET-RTU-310

Applications

- Monitoring consumption
- Building management system
- Smart city
- Thermoregulation

Accessories

- KET-ANT-203
- KET-ANT-300.S
- KET-ANT-204
- KET-PSA-230.024.036.C



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 measurement history.
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

CODE
KET-RTU-310.24

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

Technical Features	
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	**Supported Protocols**: Master or slave ModBUS RTU **Connectors types**: Removable screw terminals
Ethernet interface	**Supported Protocols**: 10/100/1000 Base-T **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 **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	**Firmware Upgrade**: Remotely
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