



Pulse Counter Wireless Device

- Compatible with Signal Emission (ES) cards
- Separate consumption and production counting
- Management of tariff bands
- Extended radio range

The **KET-MES-200** is meant to be connected to the ES standard interface of electric energy counters. It counts the number of pulses related to the **energy consumed** and sold to the electricity grid.

The high sensitivity of the radio module allows to reach distances of **over 1000 m** in free air and the **integrated routing functionality** allows you to extend your network without the use of additional repeaters.

The standard antenna connector supports 90° joint antennas or cabled ones for placement outside the electrical panel.

Maximum **power supply flexibility**: the product can be plugged on the power supply network or low voltage, both in DC or in AC.

New format suitable for mounting on DIN rails in electrical boxes and new internal F-RAM to continually save the counters to avoid losing data in case of sudden lack of power.

TECHNICAL FEATURES	
GENERAL SPECIFICATIONS	<b>Protection Range:</b> Front: IP40; Screw Terminals: IP20 <b>Operative Temperature:</b> -20 ÷ +60 °C <b>Storage Temperature:</b> <b>Relative Humidity:</b>
CASE	<b>Dimensions:</b> 88 x 110 x 60 mm (W x H x D) <b>Mounting:</b> Wall mounting or on DIN rail <b>Required DIN modules:</b> 5 DIN modules <b>Electric Board Type:</b> Industrial or switchboard <b>Material:</b> Blend PC/ABS sel extinguishing UL94-VO
POWER SUPPLY	<b>Supply Voltage:</b> 9 ÷ 24 VDC, 9 ÷ 20 VAC; 230 VAC with integrated power supply <b>Consumption:</b> < 1.5 W @ 9 ÷ 20 VAC / < 1.5 W @ 9 ÷ 24 VDC / < 1.5 W @ 230 VAC <b>Connectors types:</b> Screw terminal
DATALOGGER FUNCTION	<b>Memory Type:</b> Flash; 256KB; E²PROM: 4KB; RAM: 16KB <b>Data Storage Capacity:</b>
ES INTERFACE	<b>Ingressi:</b> 6 clean contacts - 2 for active and reactive energy used; 2 for active and reactive energy sold; 2 for tariff bands - 1 common <b>Response Time:</b> 80 ms <b>Maximum Working Voltage:</b> 500 VDC <b>Maximum Rated Current:</b> 1 A <b>Isolation:</b> 2000 VAC
RADIO MODULE	<b>Supported Protocols:</b> X-Monitor Protocol (X-MP) / IEEE 802.15.4 / ZigBee™ Pro 2.0 <b>Radio Frequency:</b> 2.4 GHz ISM Band <b>Output Power:</b> +3 ÷ +20 dBm <b>Sensitivity:</b> -104 dBm <b>Antenna Type:</b> RPSMA connector, 90° antenna supplied <b>Max Distance (Free Air):</b> Over 1000 m
FUNCTIONALITY	<b>Radio Signal Indicator:</b> Integrated (LinkQuality) <b>Output Power Adjustment:</b> From local keyboard and remotely <b>Firmware Upgrade:</b> Via radio

