



## Pulse counter with optical interface for electricity meter

- 4G-LTE Modem
- Internal backup battery
- Configurable via SMS
- RS485 ModBUS RTU

The **KET-MES-420** is a device with 4G-LTE modem, which, via the KET-IOI-100 photodetector, counts the pulses related to the **consumption of energy** drawn from and fed into the **electricity grid**, and can be configured via simple commands sent by SMS. In addition, via the 4 digital inputs, the RS485 ModBUS RTU interface and the TCP/IP server it can interconnect with various industrial devices, such as PLCs, gateways, sensors, ect. Ability to set multiple timers (second, minute, day, week, month) to perform actions, such as data loading. Equipped with an internal battery with a life of 8-20 hours, the modem enters 'sleep' mode in the event of a power failure.

# KET-MES-420

### Applications

Monitoring consumption



LE SPECIFICHE TECNICHE E LE IMMAGINI RIPORTATE IN QUESTA SCHEDA TECNICA SONO SOGGETTE A VARIAZIONI E AGGIORNAMENTI

### Technical Features

General specifications	<b>Protection range:</b> ip30 <b>Operative temperature:</b> -30 ÷ +70 °c <b>Storage temperature:</b> <b>Relative humidity:</b> max 95% not condensing
Case	<b>Dimensions:</b> 95 x 63 x 25 mm (w x h x d) <b>Mounting:</b> wall or back plate mounting <b>Material:</b>
Power supply	<b>Supply voltage:</b> 9 ÷ 28 vdc (standard adapter: dc 12v/1.5a) <b>Consumption:</b> 12 v input max. 150 ma - average 50 ma <b>Connectors types:</b> screw terminal
Ups	<b>Battery type:</b> lithium-polymer 3.7v - 500 mah <b>Approximate battery life:</b> 8 - 20 hours
Processors	<b>Processor type:</b> cortex m3 32 bit arm
Rs485 interface	<b>Channels:</b> 1 <b>Supported protocols:</b> modbus rtu slave <b>Communication rate:</b> 1200 ÷ 115200 bps (default 9600) <b>Isolation:</b> <b>Connectors types:</b> screw terminal
Digital inputs	<b>Channels:</b> 4 for dry contact <b>Digital inputs:</b> set as counter with count frequency (10-50hz)
Pulse counter	<b>Max error:</b> ±0.3% @ 30 to 50 hz; ±0.11% @ up to 30 hz
Modem	<b>Supported protocols:</b> fdd lte (4g) <b>Radio frequency:</b> <b>Antenna type:</b> sma connector for gsm antenna <b>Sim type:</b> sim card voice/data
Integrated functions	<b>Services:</b> email alarm notification in case of power failure