



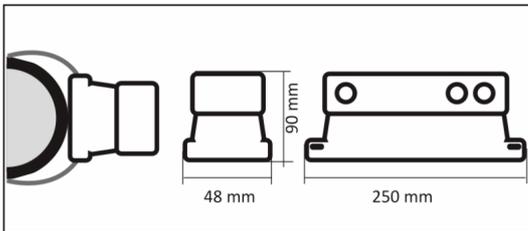
# KET-KCO-310.000

## Ultrasonic clamp-on thermal energy measurement kit

- No need to modify the system
- Easy and quick mounting
- Integrated temperature sensor
- Low consumption

**KET-KCO-310** is a kit for measuring thermal energy complete with thermal, thermal/energy to **ultrasonic** meter based on transit time for flow measurement, KET-CCC-100 computer and **PT100 temperature sensors** to measure flow and return temperatures. The KET-KCO-310 displays the energy speed and total energy thanks to the pulse output and through the RS485 interface can communicate with all the devices of the X-Monitor line for energy metering.

Applications  
Accounting



| CODE            | TUBE DIAMETER   |
|-----------------|-----------------|
| KET-KCO-310.115 | DN 22 ÷ 115 mm  |
| KET-KCO-310.300 | DN 125 ÷ 180 mm |

| Technical Features     |  |
|------------------------|--|
| General specifications | <b>Protection Range:</b> IP54<br><b>Operative Temperature:</b> 0 ÷ +50 °C<br><b>Storage Temperature:</b> -10 ÷ +60 °C<br><b>Relative Humidity:</b> MAX 90% not condensing  |
| Case                   | <b>Dimensions:</b> 250 x 48 x 90 mm (W x H x D)<br><b>Mounting:</b> Pipe mounting<br><b>Material:</b> Self-extinguishing; UL 94 V-0  |
| Power supply           | <b>Supply Voltage:</b> 12 ÷ 24 VAC / VDC<br><b>Consumption:</b> Max 7 VA<br><b>Connectors types:</b> Screw terminal  |
| Rs485 interface        | <b>Supported Protocols:</b> ModBUS RTU<br><b>Communication Rate:</b> 1.2 ÷ 38.4 Kpbs<br><b>Connectors types:</b> Screw terminal  |
| Digital outputs        | <b>Channels:</b> Pulses with amplitude range 3 ÷ 99 ms<br><b>Voltage Output:</b> 48 VAC @ 500 mA; isolated 2500 V  |
| Temperature sensor     | <b>Measure Range:</b> 0 ÷ +85 °C<br><b>Precision:</b> PT100 Classe B<br><b>Resolution:</b> 0.1 °C  |
| Flow meter             | <b>Principle of Operation:</b> Ultrasonic based on transit time<br><b>Speed Range:</b> 0.1 ÷ 10 m/s bidirectional<br><b>Resolution:</b> ±50 ps<br><b>Repeatability:</b> 0.5% of the measured value<br><b>Precision:</b> 1-3% of flow reading for a flow rate >0.3 m/s<br><b>Measuring Frequency:</b> 200 Hz<br><b>Response Time:</b> 50 ms<br><b>Tube Diameter:</b> DN 22 ÷ 115 mm or 125 ÷ 180 mm |
| Certifications         | <b>Referends Standard:</b> 2014/30/EU, 2014/35/EU<br><b>Security:</b> EN61010-1:2010, EN61326-1:2013, EN61326-2-3:2013<br><b>Metrology:</b> EN1434   |