

ZR-HMETER.D-M

ZigBee electricity meter and remote control din rail unit



Key Features

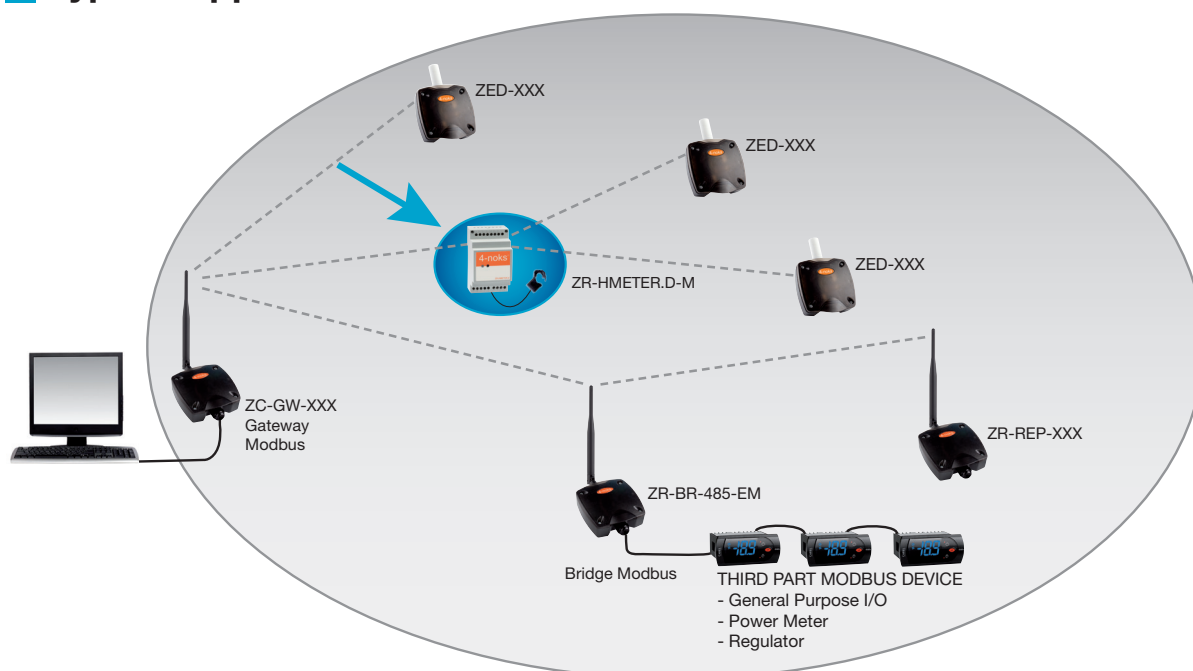
- Real Time Electricity Active Power Measurement up to 15 kW with external CT included
- Electricity Energy Counter
- Digital output to drive external high power relay
- Stand-by killer
- Override push-button
- CT included with core split
- Din Rail Mounted
- Modbus profile on ZigBee platform
- Router function

The ZR-HMETER.D-M electricity meter is part of the ZB-Connection family. It includes an external 70Amp current transformer to measure real time power up to 15kW and has an energy counter.

Moreover it has a digital output to drive high power relay. Functions as stand-by killer and override push button are also available. It is possible to set a power limit below of which the load is considered in stand-by mode and therefore the external relay is switched off. With the override push-button the user can override the last relay order issues by the Gateway. All the function are activated by simple ModBus commands issued to the ZB-Connection Gateway that transforms those commands in wireless commands.

The device is continuously powered by 230 Vac; therefore it can also act as a repeater or a “parent” device for battery-powered sensors.

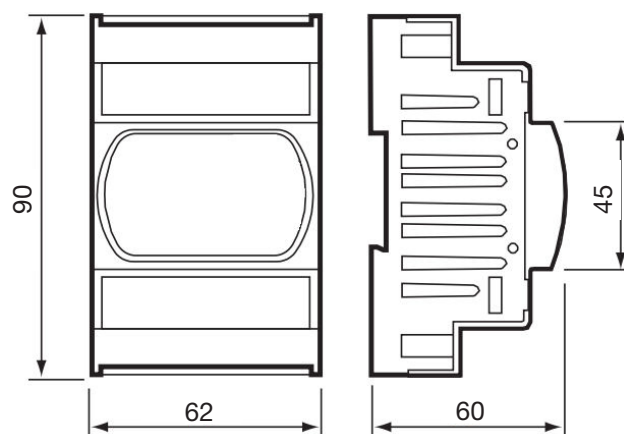
Typical Application



Technical Specs

General characteristics	Chip Ember EM250 Compatible IEEE 802.15.4 Stack EmberZnet 3.5.x (ZigBee PRO) Modbus/RTU Device address settable via radio commands
RF characteristics	Frequency: 2405 MHz ÷ 2480 MHz Modulation: DSSS Nominal transmission power: 2mW (3 dBm) Precision: class 2 Power Factor = 1 1.5 % from 5% to 100% of the nominal power, 2.5% under 5% of the nominal power Power Factor = 0.65 1.5 % from 10% to 100% of the nominal power, 2.5% under 10% of the nominal power Receiver sensitivity: -95 dBm Internal antenna gain: 0 dB Range outdoor/indoor: 100m/30m
Power Supply	90/250 Vac; 1W; 50/60Hz
Measurement	Active Power [W] Energy consumption [Wh] Energy consumption measurement time [second] Working conditions: 230V-70A Max.
Digital output	For auxiliary relay 230 Vac, 40mA max.
Connections	Terminal blocks (5,08 mm pitch)
CT	70A max.
Environment parameters	Operating temperature: -10 ÷ +60°C; <80% U.R. not condensing Storage temperature: -20 ÷ +70°C; <80% U.R. not condensing
Compliant with 2006/95/EEC, 89/336/EEC, 99/5/EEC directives Reference Norms:	ETSI EN 300 328: Radio Compatibility for digitals wide band transmissions ETSI EN 301 489: Radio Compatibility EN 55014-1:2006 + A 1:2009: Electromagnetic Compatibility - Immunity EN 61000-3-2:2006: Electromagnetic Compatibility - Emissions EN 61000-3-3:2008: Electromagnetic Compatibility - Emissions EN 55014-2: Electromagnetic Compatibility - Immunity

Dimensions (mm)



Rev 2.6 29/08/2014

 **ZB-Connection** is a 4-noks brand

4-noks is a  **ZigBee**
Member

4-noks®

4-noks s.r.l.
 Via per Sacile, 158
 31018 Francenigo di Gaiarine - Treviso - Italy
 Tel. (+39) 0434.768462 Fax (+39) 0438.694617
 info@4-noks.com - www.4-noks.com

4-noks Distributor: