

**ZC-GW-ETH-EM**  
**ZC-GW-ETH-EPM**

**Gateway Modbus Ethernet – ZigBee**



**Key Features**

- Ethernet interface between a ZigBee network and the external environment
- Using the Modbus/TCP-IP protocol
- Coordinator function for a ZigBee network
- Local memory stores battery powered sensors data
- Transparent bridge towards other Modbus devices
- External antenna
- Power over ethernet (POE) version

Gateway Modbus Ethernet is part of the family of 4-noks wireless ZigBee devices. Its purpose is to be an interface between a Personal Computer or an advanced PLC with the network of 4-noks devices using an universal standard protocol such as Modbus/TCP-IP and trough Ethernet network.

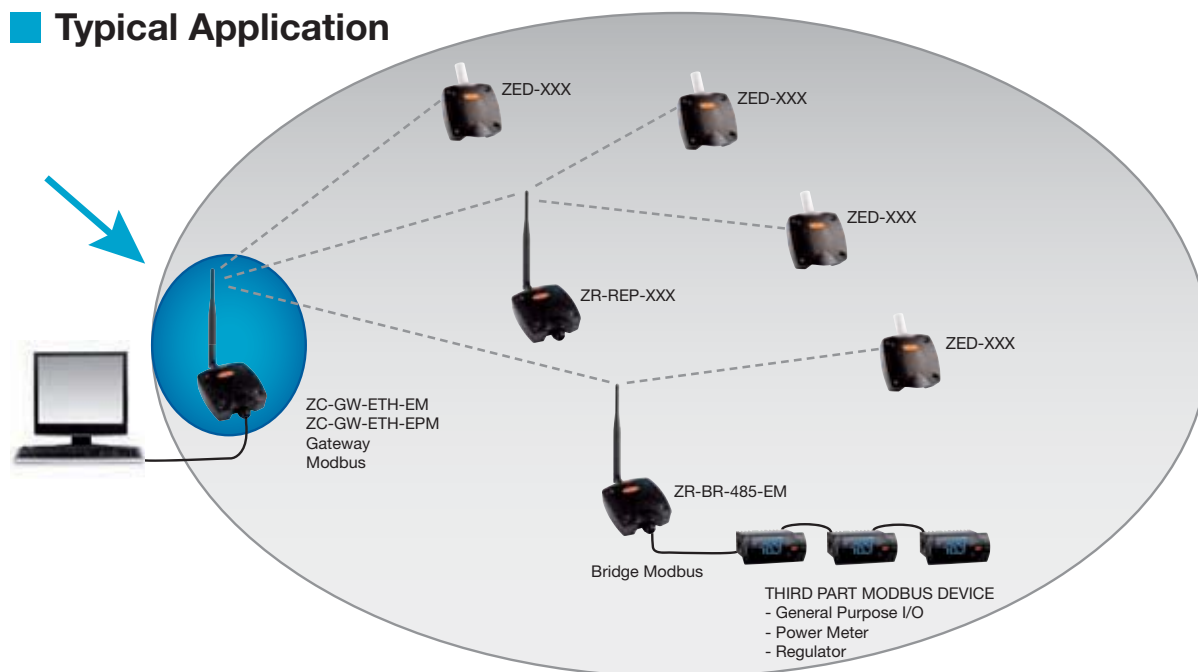
The use of an Ethernet network allows to position the Personal Computer or the PLC in places that are far from the ZigBee network or in very remote places if an internet connection is available.

Its role in the ZigBee network is Coordinator, i.e. it forms an active part of creating the network and maintaining wireless traffic from and to other similar devices. Furthermore it can function as parent device for battery powered sensors of the same family and saves data that they asynchronously send regardless of Modbus requests.

In conjunction with the bridge ZR-BR-EM, this gateway offers a transparent Modbus channel.

The device with the part number ZC-GW-ETH-EPM is supplied by 48Vdc on the Ethernet cable (POE), whereas the part number ZC-GW-ETH EM is supplied by external supply (12Vdc).

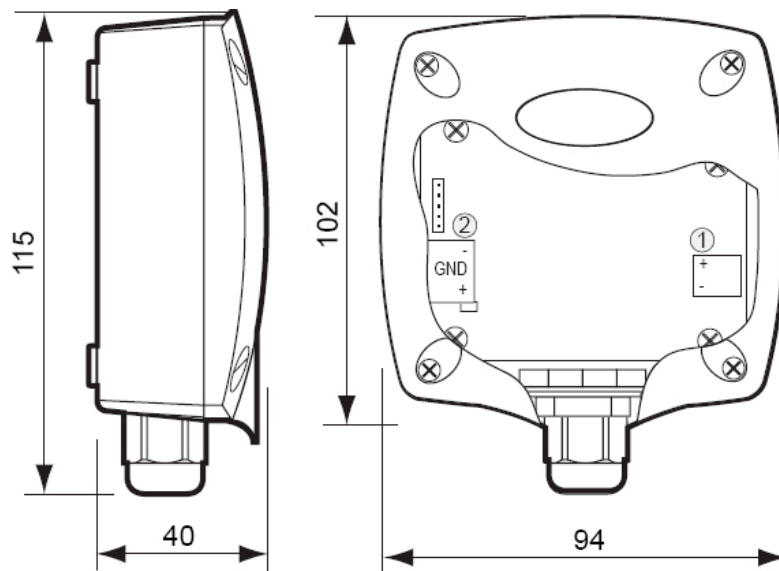
**Typical Application**



## Technical Specs

<b>General characteristics</b>	Chip Ember EM2420 Compatible IEEE 802.15.4 Stack EmberZnet 3.4.x (ZigBee PRO) Modbus/RTU DIGI Connect ME model for Ethernet interface Addressing via WEB or DHCP interfaces
<b>RF characteristics</b>	Frequency: 2405 MHz ÷ 2480 MHz Modulation: DSSS Nominal transmission power: 1mW (0 dBm) Reception sensitivity: -92 dBm Extern antenna Gain: 5,5 dB Coverage outdoor/indoor: 100m/30m
<b>Supply</b>	ZC-GW-ETH-EM: extern supply +12 Vcc ; 200mA ZC-GW-ETH-EPM: POE – 48Vcc
<b>Connections</b>	Ethernet: RJ45
<b>Environment parameters</b>	Operating temperature: -10 ÷ +60°C; <80% U.R. not condensing Storage temperature: -20 ÷ +70°C; <80% U.R. not condensing Degree of protection: IP 50
<b>Compliant with 2006/95/EEC, 89/336/EEC, 99/5/EEC directives Reference Norms:</b>	ETSI EN 300 328: Radio Compatibility for digitals wide band transmissions ETSI EN 301 489: Radio Compatibility EN 61000-6-2: Electromagnetic Compatibility - Emissions EN 61000-6-3: Electromagnetic Compatibility - Immunity EN 60950-1: Electric Safety

## Dimensions (mm)



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

4-noks is a  **ZigBee**  
Member

**4-noks**

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