

## ZR-TIREL2-EM

### ZigBee module with relay



#### Key Features

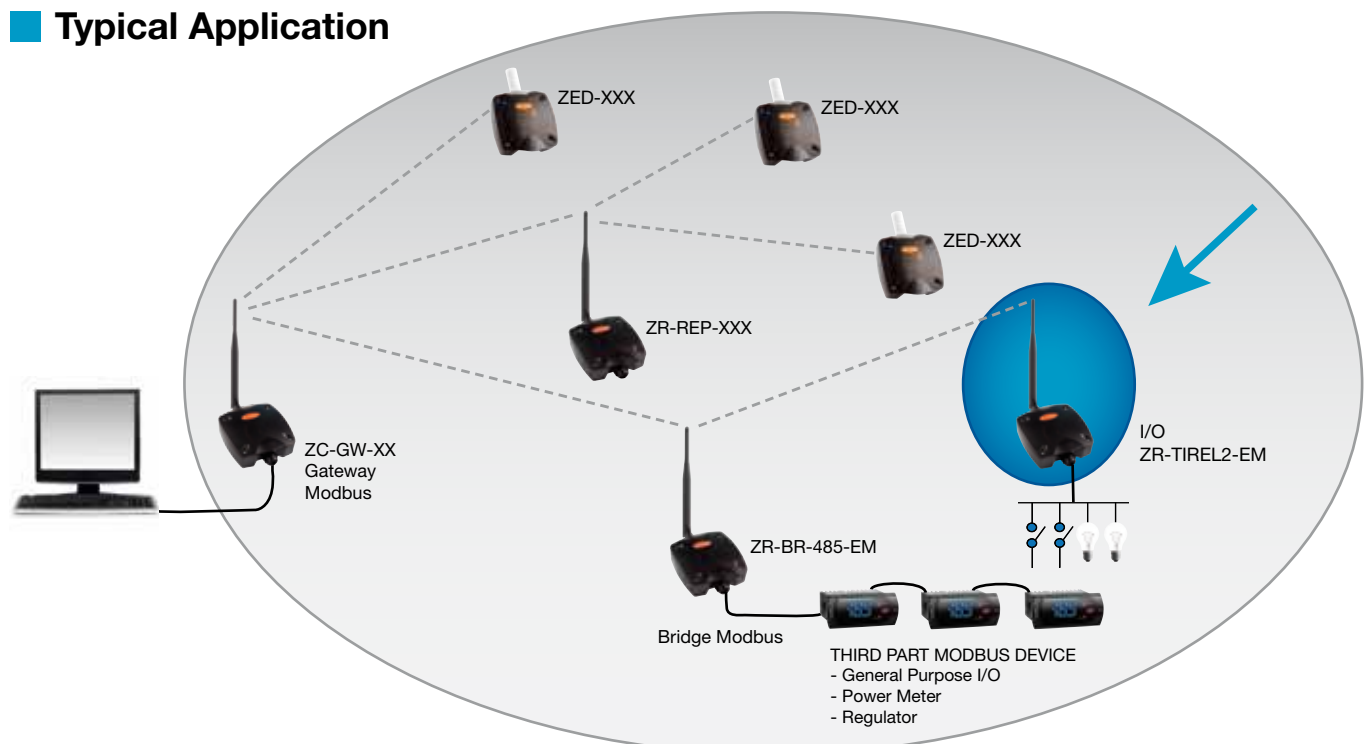
- 2 relay outputs 250V/5A
- 2 digital inputs
- 1 thermal resistor input ( NTC resistor not included)
- Programmable thermostat function
- Routing function
- 24 Vdc/Vac supply
- External antenna

The ZR-TIREL2-EM is provided with a thermal resistor input, two digital inputs and two relay outputs. It can perform the function of thermostat in programmable warm-cold operating mode with relay outputs and manages alarms based on preconfigured thresholds. Moreover it sends data at regular intervals to a Gateway belonging to the 4-noks products family.

The thermostat functionality may be disabled; in this situation inputs and outputs are directly managed by PLC or SCADA connected to the Gateway.

The device is supplied at 24Vdc/24Vac continuously; therefore it can also act as a repeater or a “parent” device for battery-powered sensors.

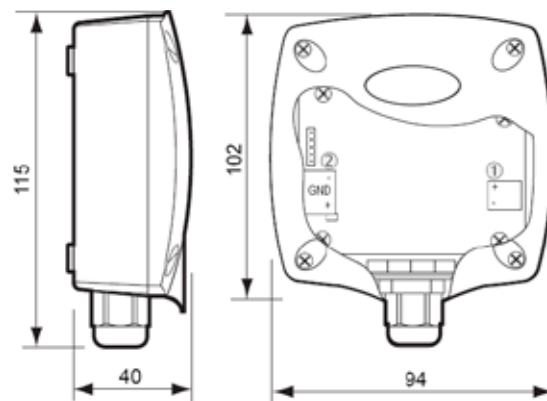
#### Typical Application



## ■ Technical Specs

General characteristics	<p>Chip Ember EM2420            Compatible IEEE 802.15.4            Stack EmberZnet 3.5.x (ZigBee PRO)            Modbus/RTU            Device address settable via internal dip-switch            Wall mounting with screws            Cable gland: PG9</p>
RF characteristics	<p>Frequency: 2405 MHz ÷ 2480 MHz            Modulation: DSSS            Nominal transmission power: 1mW (0 dBm)            Receiver sensitivity: -92 dBm            Extern antenna Gain: 5,5 dB            Range outdoor/indoor: 100m/30m</p>
Power Supply	24 Vdc/Vac (±10%); 50mA; 50/60Hz
NTC thermal resistors input	<p>NTC sensor            103AT type (R25 = 10 KOhm; Beta = 3435K)            Measurement range: -50°C ÷ +100°C            Measurement resolution: 0,1°C            Measurement accuracy: ±1,0°C</p>
Digital inputs	<p>Electronic type not insulated inputs for clean contact            Short circuit current 0,01mA. Use self-cleaning contact</p>
Relay	<p>Coil 24Vdc            Contacts 250V/5A</p>
Connections	Pull out terminals (3,81 mm pitch)
Environment parameters	<p>Operating temperature: -10 ÷ +60°C; &lt;80% U.R. not condensing            Storage temperature: -20 ÷ +70°C; &lt;80% U.R. not condensing            Degree of protection: IP 55</p>
Compliant with 2006/95/EEC, 89/336/EEC, 99/5/EEC directives Reference Norms:	<p>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</p>

## ■ Dimensions (mm)



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

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