



DB2-BRG

Bridge ZigBee – ModBus RS485



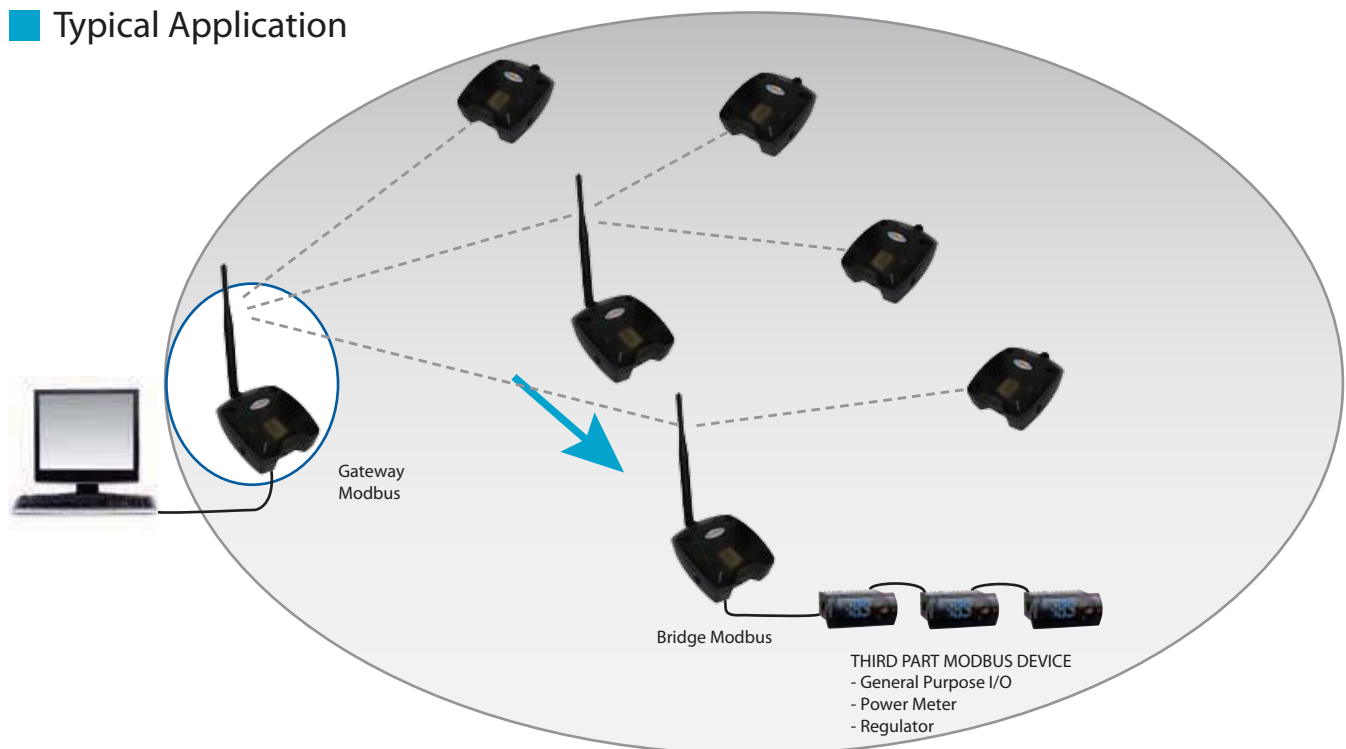
■ Key Features

- Connecting Modbus devices to the ZigBee network
- Using Modbus/RTU protocol and RS485 interface
- Routing function
- RF power 1mW
- External antenna

The Bridge has the main function to connect through a ZigBee network one or more Modbus slave devices equipped with RS485 interface to one of the Gateways of the Digitron products family. In this way the PLC or PC-SCADA connected to the Gateway can communicate with Modbus slave devices eliminating wire installation. This channel is completely transparent.

Furthermore it can be a repeater and a parent device for battery powered sensors.

■ Typical Application

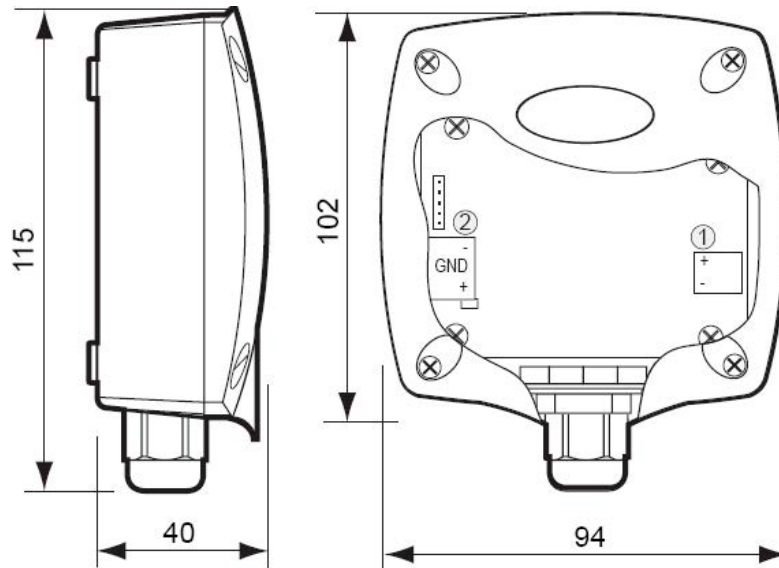


■ Technical Specs

General characteristics	Chip Ember EM2420 Compatible IEEE 802.15.4 Stack EmberZnet 3.4.x (ZigBee PRO) Modbus/RTU
RF characteristics	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
Supply	12-24 Vcc/Vca ($\pm 10\%$); 100mA; 50/60Hz
Connections	Supply: pull out terminals (3,81 mm pitch) RS-485 interface: extraction clamps (pitch 3.81 mm)
Environment parameters	Operating temperature: -10 ÷ +60°C; <80% U.R. not condensing Storage temperature: -20 ÷ +70°C; <80% U.R. not condensing Degree of protection: IP 55 ⁽¹⁾
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 61000-6-2: Electromagnetic Compatibility - Emissions EN 61000-6-3: Electromagnetic Compatibility - Immunity EN 60950-1: Electric Safety

⁽¹⁾ This protection degree is preserved only if a unique cable with external section less than 8 mm is used for both supply and RS485 signals.

■ Dimensions (mm)



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Digitron

