

Wireless Pulse Counter ZPC-10/ZPC-20

data sheet



FEATURES

- › Easy to install and commission
- › Mains- and battery-powered versions available
- › Pulse frequency up to 4Hz (battery) /30Hz (mains)
- › Battery life up to 10 years (subject to pulse frequency and reporting interval)
- › On-board data logging of up to 10,000 data points
- › Waterproof polycarbonate enclosure
- › Fully wireless communications
- › Wireless range up to 300m (LoS)
- › Dimensions (LxWxH): 144mm x 112mm x 35mm
- › Self-healing mesh network
- › 2.4GHz ISM band ZigBee® wireless radio
- › Fully secure communications: 128-bit AES encryption
- › Over-the-air software upgrade capability



INTRODUCTION

The ZPC Wireless Pulse Counter interfaces to electricity, water and natural gas utility meters. Pulse readings are reported to the NGR-30 Smart Gateway at a configurable interval. Large networks of multiple ZPC units can connect to the Smart Gateway and deliver data to a central location for detailed analysis of energy and water consumption data. If wireless communications break down, up to 10,000 data points will be logged automatically.

The ZPC unit has on-board ZigBee wireless communications, is housed in a waterproof polycarbonate enclosure, and is available as a battery-powered unit (ZPC-10) or a mains-powered unit (ZPC-20).

APPLICATIONS

The ZPC is designed for situations where a legacy utility meter exists and retrofit of additional metering equipment is difficult or unnecessary.

In data centers or manufacturing plants, facility managers may not be able to disconnect an electricity or gas supply, but may have access to a pulse output from existing meters.

The ZPC is an extremely rugged, cost-effective and easy-to-deploy solution for monitoring legacy utility meters within commercial and industrial buildings.



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SPECIFICATION



Dimensions for ZPC-10 /ZPC-20 Wireless Pulse Counter

Ordering Code	ZPC-10 ZPC-20	Battery-Powered Wireless Pulse Counter Mains-Powered Wireless Pulse Counter
Pulse Input	Channels Max. Pulse Frequency Min. Pulse Length	Single Channel 4 Hz (battery)/30Hz (mains) 10 mS
Battery (ZPC-10 only)	Lifetime Type	up to 10 years (30 min reporting interval) Lithium Thionyl Chloride (permanent)
Certification	Certification	CE
Wireless Technology	Radio Technology Radio Frequency Channels Max Tx Power Rx Sensitivity Data Rate	ZigBee Pro 2.4 Ghz ISM Band 16 Channels (11 - 26) +3dBm (+5dBm in Boost Mode) -98dBm @ 1% Packet Error Rate up to 250 kbits/sec
Wireless Range	Indoor Range Outdoor Range	up to 50m up to 300m (direct line of sight)
Security	Encryption	128-bit AES Encryption
Physical	Dimensions (LxWxH) Weight Mounting Enclosure	144 x 112 x 35 mm 150g Wall Mounting Holes Polycarbonate, Waterproof (IP67)
Operating Conditions	Operating Temperature Operating Humidity	-40°C to +85°C up to 80% (non-condensing)