



ZWM-10

Water Meter Interface

○ INTRODUCTION

The ZWM-10 Water Meter Interface is a battery powered wireless communications device based on EpiSensor's SiCA Platform which can automatically deliver water meter data to a central location via the web.

Using secure & reliable Zigbee wireless communications, data is transferred through a SiCA Gateway to a server where it can be used for advanced billing and monitoring applications.

It is housed in a waterproof (IP67) enclosure and can last up to 10 years on a single battery. The device interfaces with various compact and accurate smart water meters.

○ APPLICATIONS

EpiSensor's ZWM-10 Water Meter Interface is suitable for both large scale, city-wide automatic metering systems and water sub-metering in commercial buildings. It can deliver accurate real-time water consumption data to a control center for billing customers and analysing failures in a distribution system.

It is also an essential tool for facility managers who are implementing resource efficiency policies in buildings, sub-metering tenants or analysing areas of waste. With its long battery life, waterproof enclosure and secure wireless communications technology, the ZWM-10 is perfectly suited to a wide range of smart water metering applications.

○ FEATURES

Fully wireless sensor

Programmable reporting interval

Works with a variety of smart water meters

Lasts up to 10 years on a single battery

Secure & reliable Zigbee communications

Waterproof enclosure (IP67)

Range of up to 300m outdoors, 50m indoors

Serial Communications to Water Meter

○ SPECIFICATION

Wireless: IEEE 802.15.4 (ZigBee PRO)

Device Type: Zigbee End Device

Radio Frequency: 2.4 Ghz ISM Band

Security/Encryption: 128bit AES Encryption

Data Rate: Up to 250 kbits/sec

Battery: 3V Lithium

Dimensions: 144mm x 112mm x 35mm

Enclosure: Polycarbonate, IP67 Rated

Weight: 360g



EpiSensor Limited, Moylish Park, Limerick Ireland.
Tel: +353-61-490185 | Fax: +353-61-490186
Email: sales@epi-sensor.com | Web: www.epi-sensor.com

rev7, 18/11/09



○ WATER METER INTERFACE

Parameter	Value
Compatible Water Meters	(contact us for list of compatible meters)
Comms Technology	Serial Communications Protocol
Water Flow Parameters	Records Accumulated Volume (m ³)
Error Parameters	Records Leakage, Tamper and No-Flow
Battery Life	10 years under normal conditions
Display	Manual Read LCD Display

○ WIRELESS

Parameter	Value
Max Tx Power	+3dBm (+5dBm in Boost Mode)
Rx Sensitivity	-98dBm @ 1% Packet Error Rate
Radio Frequency	2.4 Ghz ISM Band
Channels	16 Channels (11 - 26)
Data Rate	up to 250 kbits/sec
Encryption	128bit AES Encryption
Indoor Range	up to 50m
Outdoor Range	up to 300m (direct line of sight)

○ PHYSICAL

Parameter	Value
Dimensions	144 x 112 x 35 mm
Weight	360g
Mounting	Wall Mounting Flanges
Enclosure	Polycarbonate Plastic, IP67 rated
Operating Temperature	-40°C to +85°C
Operating Humidity	up to 80% (non-condensing)

○ APPLICATIONS

- Automatic Meter Reading
- Water Usage Analysis
- Water sub-metering
- Efficiency & Leakage Analysis
- Water Saving Initiatives
- Invoice Validation
- Carbon Footprint Analysis

○ APPLICATION AREAS

- Commercial & Industrial Buildings
- Domestic Automatic Meter Reading
- Universities, Hospitals and Public Buildings
- Hospitality, Retail, Manufacturing