



### Benefits

- Using LoRaWAN technology for wireless monitoring
- Anti-tampering function triggers automatically and sends alarm to system when sensor is away from Cyble target of meter
- Easy to configure, low deployment cost
- Compatible with B&R water meters with multiple inductive sensir, for support accurate reading
- Battery powered, lifetime up to 5+ years



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**IP68  
Protection**

# B&R METER SENSOR

An add-on sensor for the B&R Water Meter data collector integrates LoRaWAN communication and utilizes advanced in-house sensor acquisition algorithms to accurately collect water meter data. Uniquely designed for compatibility with B&R water meters, this collector excels in its specialized application.

### Sensor implementations:



WTP/WWTP/PDAM



APARTMENT



INDUSTRIAL ESTATE



RESIDENTIAL



PUMP HOUSE



BUILDING



Rukan Crown, Blok A No.25, Jl. Green Lake City Boulevard, Tangerang, Banten 15147



+62 813 9999 1485



iki@weiotics.io

<https://weiotics.io/>



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## ADD-ON B&R WATER METER SENSOR



The B&R water sensor aids in collecting data and transmits it online using LoRaWAN communication technology. Specifically developed to be compatible and integrated with B&R water meters, this sensor meets the monitoring needs of water distribution suppliers in the Jakarta area.

Additionally, it incorporates state-of-the-art LoRa technology from STMicroelectronics, supporting a maximum transmission power of 22dBm and a reception sensitivity of -134dBm. Powered by a lithium battery, the sensor offers long-lasting performance with a battery life of up to 5 years.

- The System on Chip (SoC) integrates both LC sensor and LoRa communication technology into a single chip,
- The System on Chip (SoC) integrating ARM Cortex-M4 core is capable to realize complex algorithms and functions to meet the needs of different Internet of Things applications,
- Anti-tampering function triggers automatically and sends alarm to system when sensor is away from Cyble target of meter,
- Battery management: Using unique primary (Li-SOCI2) battery management technology not only provides precision usage calculation and loading leakage detection but also keeps the battery in health condition across the battery life,
- Unique temperature and drift compensation algorithms is used for LC sensor,
- Another alerting system can be customized.

### LoRa Parameters

PARAMETERS	B&R WATER METER SENSOR READER
Communication protocol	LoRaWAN
Network registration way	OTAA, ABP
LoRaWAN uplink confirmation	Confirm or Partially Confirm
MCU	Arm® 32-bit Cortex®-M4
Memory	256KB Flash; 64KB RAM
ISM Band	AS923, AU915, EU868
TX Power	Up to 22dBm
Uplink channels	8 settable channels with bandwidth of 125kHz
RX Sensitivity	Down to -125dBm@BW = 125 kHz, SF = 7





PARAMETERS	B&R WATER METER SENSOR READER
Spreading factor	SF7 ~ SF10(Adaptive)
LBT (Listen Before Talk)	Yes
Report interval	Configurable via downlink commands
Data cache when LoRa network interrupt	Yes
Data logger in local device	Optional
Communication distance	3 km to 10 km (Eyesight distance in open space)
Near field communication way	Infrared tools (with Sindcon Mobile Apps)
Anti-dismantling alarm function	Yes

## Electrical Parameters

PARAMETERS	B&R WATER METER SENSOR READER
Power supply	3.6V (ER26500 8500mAh)
Standby current	$\leq 70\mu\text{A}$
Active current	$\leq 5\text{mA}$
TX current	$\leq 127\text{mA}$ @ 22dBm
Battery life	Up to 10 years
Battery usage monitoring	Accurate Coulomb Measurement
Battery undervoltage warning	Yes
MCU temperature monitoring	Yes
CPU working temperature	-10°C ... 60°C
Storage temperature	-10°C ... 60°C



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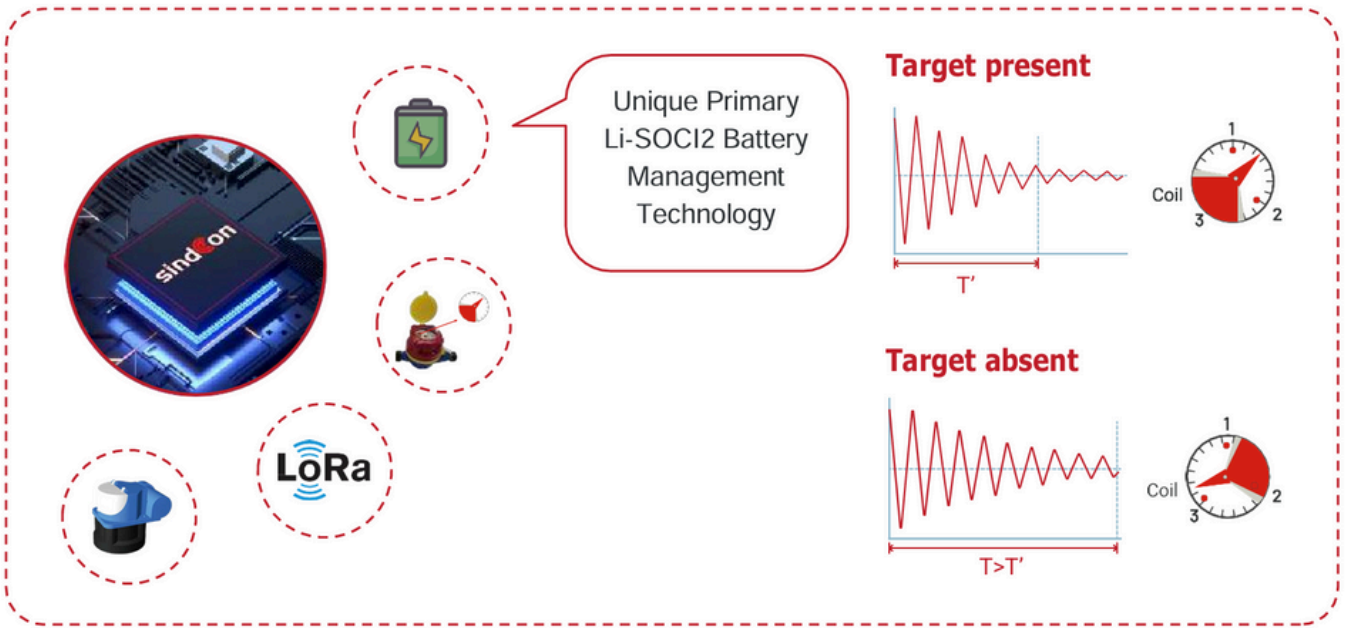


iki@weiotics.io

<https://weiotics.io/>



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## INSTALLATIONS



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iki@weiotics.io

<https://weiotics.io/>



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