



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 water meters and gas meters that is equipped with LC sensor target



**KOMINFO
CERTIFIED**

**IP68
Protection**

NONMAG SENSOR

An add-on sensor, powered by STMicroelectronics' advanced LoRa SoC, combines with expertise in single-chip solutions with LC sensor interface and LoRa communication technology. It's a perfect fit for Itron water and gas meters equipped with Cyble Target, ensuring an exceptional 10-year battery life.

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/>



**IOT
KREASI
INDONESIA**

ADD-ON WATER METER SENSOR



An add-on sensor designed to read pulses from existing water meters, this sensor offers high compatibility with Itron water meters and gas meters equipped with Cyble Target. Powered by a long-lasting battery, with a lifespan of up to 10 years accurately calculated by our battery management system, it becomes the ideal choice for users who prioritize high-quality and long-lasting performance.

It contains the following feature and benefits :

- Built in unique temperature and drift compensation algorithm is used for the LC sensor
- Anti-tampering function triggers automatically and sends alarm to system when sensor is away from Cyble target of meter
- The System on Chip (SoC) solution is designed for super low power consumption, with a battery life up to 10 years
- 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,
- Uniques primary (Li-SOCI2) battery management technology not provides precision usage calculation and loading leakage detection but also keep the battery in health condition across the battery life
- The casing is designed to be waterproof with an IP68 rating and feature a replaceable battery

LoRa Parameters

PARAMETERS	CYBLE NONMAG SENSOR
Communication mode	LoRaWAN
Device type	Class A
Network registration way	OTAA, ABP
LoRaWAN uplink confirmation	Confirm or partially confirm
MCU	Arm® 32-bit Cortex®-M4
Memory	256KB Flash; 64KB RAM
ISM Bands	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



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



+62 813 9999 1485



iki@weiotics.io

<https://weiotics.io/>



IOT
KREASI
INDONESIA



PARAMETERS	CYBLE NONMAG SENSOR
Spreading factor	SF7 ~ SF10(Adaptive)
LBT (Listen Before Talk)	Yes
Report interval	Configurable via Downlink Commands
Anti-tampering	Yes
Anti-dismantling alarm function	Yes

ELECTRICAL PARAMETERS

PARAMETERS	CYBLE NONMAG SENSOR
Power supply	3.6V (ER26500 8500mAh)
Standby Current	$\leq 70\mu\text{A}$
Active current	$\leq 5\text{mA}$
TX Current	$\leq 127\text{ mA @}22\text{dBm}$
Battery life	Up to 10 years
Battery usage monitoring	Accurate coulomb measurement
Battery undervoltage warning	Yes
MCU temperature monitoring	Yes
Working temperature	-10°C ... 60°C
Storage temperature	-10°C ... 60°C



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



+62 813 9999 1485



iki@weiotics.io

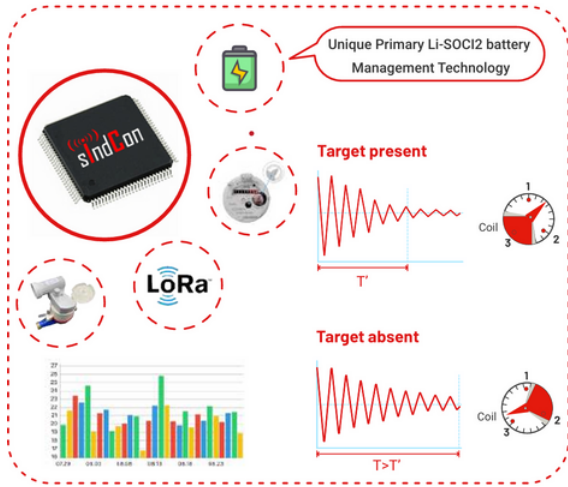
<https://weiotics.io/>



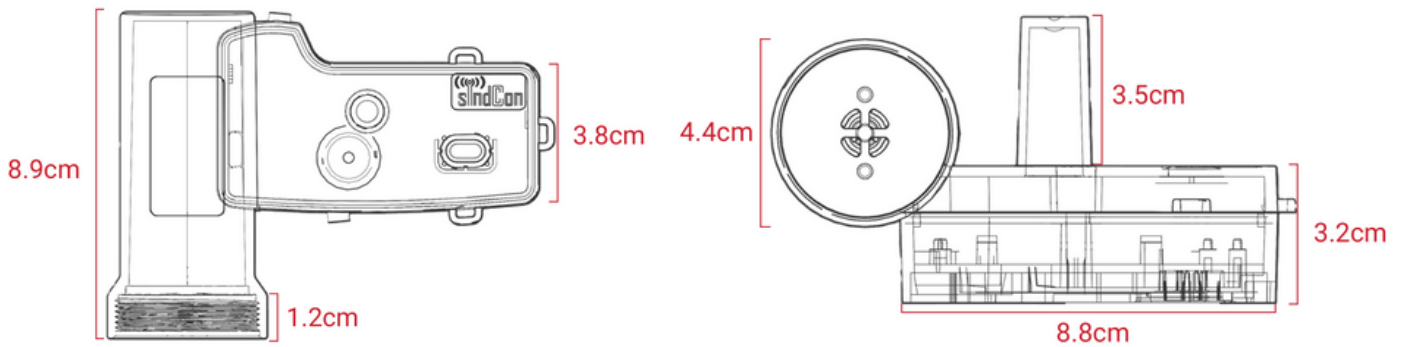
**IOT
KREASI
INDONESIA**



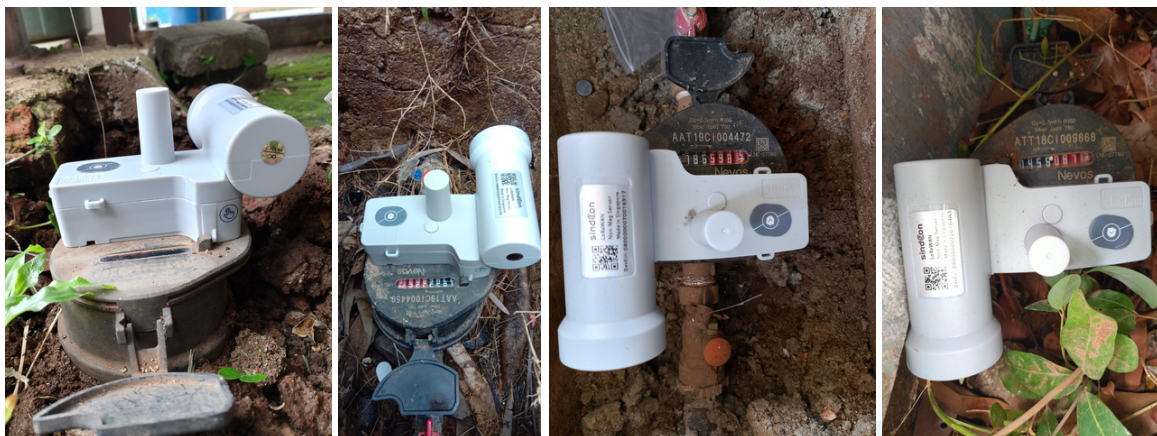
COMPONENT & IMPLEMENTATIONS



DIMENSION



INSTALLATIONS



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



+62 813 9999 1485



iki@weiotics.io

<https://weiotics.io/>



IOT KREASI INDONESIA