

3 in 1 Residential Remote Metering System

The remote metering system consists of 3 main components working together to provide smart metering solution suitable to be use in commercial and residential units.



1 Sensor Unit

Records pulse signals generated from magnetic or inductive AMR-enabled water meters. Data collected by network agnostic transmitters for onward transmission to concentrators.



2 Wireless Transmitter

Conveys data collected from the sensors to the display unit. Up to 4 sensors can be connected, depending on the type of wireless transmission used. Conducts ad-hoc networking through low power transmission of < 50mW (e.r.p).



(Optional) Display Unit

Receives and forwards data from 60 transmitters to the concentrator. Displays vital information such as meter data, timestamp and battery level. Data can be collected using an infrared handheld device. In any case of device malfunction, it can store up to 1 year of meter data.



3 Concentrator

Receives data from 40 displays unit or direct connection to 60 transmitters. Information will then be transmitted to operator's back-end server to be further analyzed.



Cloud

Data collected from the Remote Metering System can be managed by our Non-Revenue Water management system. Alerts such as low battery, tampering and zero consumption can be sent through the system to operators and customers directly.

Key Features



Leak Detection



Customizable Meter Data Reading and Transmission Interval



Compatible with Most Pulse-Enabled Meters



Wire Cut Alarm



Internal Memory Data Storage

Technical Specification

Specification	Transmitter	Display	Concentrator
Transmitting Power	+11-17dBm (Auto Adjustment)		
Sensitivity	-117dBm	-117dBm	-121dBm
Operating Voltage	3.6 VDC	3.6 VDC	7.2 VDC
Effective Distance	1500m (field)		
Maximum Current	<50mA	<60mA	>50mA
Standby Current	<40 μ A	<60 μ A	<200 μ A
Battery Life	Minimum 6 years		
Operating Temperature	-20°C to 70°C		
Supported Wireless Modules	GFSK / LoRa / NB-IOT / LTE /GSM		

Certifications



IP68 Certification



Anti-electromagnetic Wave Interference
(Certified by China National Accreditation Service for Conformity Assessment)

Benefits

- ✓ Cost efficient
- ✓ Minimal manual work required - no manual collection of meter reading needed
- ✓ Easy to install
- ✓ Instant printing of water bill
- ✓ Displayable water consumption to end users
- ✓ Easy integration to ZHTI NRW SCADA or customers' backend server
- ✓ No maintenance required