

LoRaWAN Smart Water Meter

RHF1S051 and RHF1S052 is a LoRaWAN Smart water meter designed by RisingHF. It supports dual- input pulse counter to achieve water meter reading.

RHF1S051 and RHF1S052 Smart water meter sense meter reading real time, and uplink to LoRaWan server periodically. It also support reading the history data via the downlink command.

The sensor with local data storage offered a backup support for the meter reading in

data management which offered an alternative mean for the database server to collect the data.

RHF1S051 is designed for cold water meter which works in LoRaWAN class A, and doesn't have valve control.

RHF1S052 is designed for hot/warm water meter which has built-in motor engine to support Valve control and work in LoRaWAN class B, to improve the downlink control respond time.

APPLICATION

- Smart water meter
- Valve control
- Pulse counting



FEATURES

- ◆ Radio Power up to 21dBm, Receiver sensitivity Down to -137dBm@SF12.
- ◆ Support Global LoRaWAN standard, easy to plug and use.
- ◆ Internal antenna, 0dBi Peak Gain.
- ◆ Support dual battery power supply, one of them will be a backup and switched automatically if the main battery power down. More safe power supply.
- ◆ Dual- input pulse counter to achieve water metering.
- ◆ Strong magnetic field detect and alarm enabled for abnormal interference.
- ◆ Accumulated water metering data uplink periodically, period time can be configured, battery capacity will be reported together with water metering data.
- ◆ Support downlink read history accumulated water metering data.
- ◆ Support downlink accumulated water metering data calibration.
- ◆ Support downlink valve control, better response time via Class B.
- ◆ History accumulated metering data stored locally to enable backup data management.
- ◆ Manual trigger the metering data uplink for field test and maintenance.
- ◆ Optimized power consumption design, battery life time 10 year for RHF1S051, 8 year for RHF1S052 typical use case.
- ◆ Operation temperature range: -20 to +85°C.

ORDERIGN INFORMATION

Part number	Description
RHF1S051	LoRaWan Class A Smart water meter, without valve control, for cold water use case
RHF1S052	LoRaWan Class B Smart water meter, with valve control, for hot/warm water use case. Sensor could also be operated in Class A mode without valve control function.