

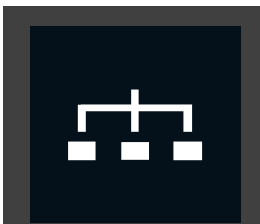
# RTU Unit For Water Flow Meter



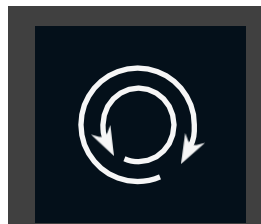
## Introduction -

RTU Unit Flow Meter is a fully integrated unit: data-logger, cell modem and battery all together, fit into an extremely compact and robust aluminum case. In contrast to standard logger solutions this RTU does not need a separate enclosure, lots of wires to modem, battery and antenna, complicated setup to make the logger talk to the modem, etc. This RTU is truly plug and play. Connect the sensors and your solar panel by simply screwing in a connector, insert your SIM card.

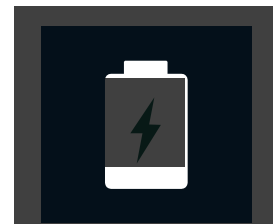
Supporting many analog and digital sensors, lots of pulse counters and even TTL outputs, it can be expanded to far beyond 100 I/O channels, making it a truly universal RTU for all kinds of environmental monitoring tasks. RT Unit flow meter GSM/GPRS was developed to meet the most stringent requirements towards a universal telemetry station: high resolution, WMO compliance, synchronous and asynchronous monitoring, lots of memory, 60 I/O channels, and much more. It comes in a robust aluminum housing, with integrated battery and quad-band Motorola GPRS modem. Power is supplied by a solar panel the size of a postcard.



Modbus Available



Synchronous/asynchronous  
sampling method



Internal Battery

## Applications -

- Agriculture
- Leak detection
- Environmental monitoring of water and air quality
- Detecting pressure hammers in water distribution pipelines
- Level metering in ground and surface water bodies
- Monitoring equipment with high frequency.

## Features -

- SDI-12 port Integrated
- Integrated wind gust monitor
- Rain intensity monitoring
- Modbus option Available.
- Analog resolution is 16-bit
- Max. number of SDI-12 sensors is 40
- Sensor excitation voltage is stabilized or battery voltage
- Sampling methods is synchronous or asynchronous.

## Technical Specifications -

Type	Details
Frequency ranges	850 & 1900 MHz
Operating temperature	-20°C ... +65°C / -4°F ... 149°F extended temp. ranges from -30°C ... +75°C / -22°F ... 167°F upon request
Mounting	Mast mounting bracket, integrated
Analog inputs	12 x 0...1V/2.5VDC (3 channels on Port C can be programmed to a measuring range of 0...150mV DC low temp. drift with internal amplification)
SIM-Cards	small form factor
Digital inputs	40 x SDI-12 Values
Connection types	- GSM: CSD Circuit Switched Data - UMTS: optional - GPRS
Sensor excitation voltage	Programmable: - Unregulated battery voltage from 5.5V ..... V - Stabilized voltage, programmable from 3.3V ... 5.5V in 0,1V increments
- UMTS: optional	yes
GPRS connection settings	Programmable: - permanent connection - scheduled connection, from 1 x per minute to 1 x per day
Antenna	Omni directional, vertical, TNC jack, +2dBi
Connectors for sensors and power	4 x M9 female 7-pin to sensor 1 x M9 female 5-pin to power IP-67 protection class Sockets: brass, nickel plated, with gold plated socket contacts Protective cap
Power Supply	Internal 6.2V battery, charged by solar panel or mains power supply

## ***Telemetric Features***

- Operating temperature -20°C ... +65°C
- SIM-Cards small form factor
- Quad-band 850/900/1800/1900MHz
- GSM: CSD Circuit Switched Data
- GPRS
- Sensor excitation voltage Programmable:
- Stabilized voltage, programmable from - 3.3V
- permanent connection scheduled connection, from 1 x per minute to 1 x per day
- Antenna Omni directional, vertical, TNCjack, +3dBi pcb type
- Micro controller based
- Small volume, easily embedded to other products
- Power required 12volt 2 amp (adaptor is provided along system for converting single phase 220 to 12-volt DC)
- PC interface
- Easy to installed

## ***Other customizable***

- Solar powered
- Battery (for power fluctuation)
- Tripod for mounting
- IP 65 rated encloser for weather protection
- IOT sim card

## ***Requirement from client site while installation***

- Single phase 220-volt supply
- Sim card (for online data connectivity)