



Features:

Wide Variety of Communication Options

- 3G/GPRS/CDMA five band 800/850/1700/1900/2100 MHz global coverage cellular communication
- License-free 2.4 GHz WiFi network communication
- Ethernet
- RS-485

Battery and Solar Powered Options

- Internal battery for up to 5 years continuous operation
- Optional solar panel, external rechargeable Lithium battery

Robust and Extreme Operating Temperature

- IP68 submersible to 5 meters of water
- Operating temperature: -30 to 85 °C;
operating humidity: 0~100% RH

Wide Variety of I/O Options

- Optional I/O modules: 4 digital inputs, 2 relay outputs, 4 analog inputs, 2 analog outputs
- Optional SMR I/O modules up to 16 digital/analog inputs or relay outputs
- Optional RS485 communication module for data collection, up to 8 SMR digital transmitters and 2 serial devices such as flow meters or PLCs
- Up to 2 pressure modules

High Accuracy

- Accuracy of pressure sensor: up to $\pm 0.1\%$ FS
- Accuracy of analog inputs: $\pm 0.025\%$ FS
- Pressure module with temperature compensation

Transient Pressure Detection and Logging

- 1,000,000 data values of log
- 0.01 sec transient pressure auto detection and alarming for water hammer, pipeline rupture, leakage, sudden change in demand, negative pressure, pump and valve malfunction, faulty operation, etc.
- 0.01 sec high speed transient pressure wave logging

Auto Data Collection, Logging, Event Alarming and Control

- Automatic registration and synchronization of device ID, serial number, alias, location and operation settings
- Automatic GPS locating, time synchronization and coordinates logging with process data
- Scheduled and on-demand communication: data collection, data transmission, SMS, alarm notification, wakeup standby, data upload/download, store and forward
- Log: event, alarm, transient pressure

- Configurable alarm (HH, H, L, LL) and actions including, SMS, alarm log and control outputs
- Programmable control functions: IF_THEN_ELSE, PID, Set Point, time table, alarm, manual ON/OFF
- Peer to peer communication for I/O and data exchange

Cloud Data Storage, WEB Operation and Monitoring

- Web configuration, operation, monitoring, alarm, control, Google Map display, statistical analysis, transient pressure analysis, trend, bar graph and tabular report functions
- Central communication server and application programming library for field device data collection and central communication integration
- SQL and mySQL database connection for development of application software
- Seamless SCADA software and database connectivity via OPC server
- Anytime and anywhere internet operation and monitoring

Security

- Login password access protection
- 128 bits cellular and WiFi encryption to prevent unauthorized access
- Security cable and lock
- GPS location deviation anti-theft alarm

Quick Installation

- Quick coupling SS316 pressure coupler
- IP68 quick coupling connector for system communication, remote I/O module and RS485 port

Easy Setup

- Operation parameters setup, monitoring system, I/O, battery capacity, cellular/WiFi/GPS signal and calibrate sensor via En-Guard CFG software