

RSM30

Water Quality Monitoring & Data Management System

Features and Benefits

Station Design Philosophy

The concept behind the patent pending RSM30 design is simple....design a versatile piece of water side monitoring equipment that is flexible enough to be deployed wherever you want it, give it a software framework that is second to none and provide an open-code structure that will allow advanced users the ability to customize the output that is generated. Add the option for Primodal to manage the information rich data streams and you acquire a complete yet flexible water monitoring solution.

Versatility

The RSM30 is a water quality monitoring station that is deployed at the water's edge. The RSM30 is encased in a secure NEMA 4 rated fibreglass enclosure designed for a range of diverse environmental conditions. Suitable for year-round outdoor use, the RSM30 has been designed for rapid and ease-of-operation deployment. Climate control options can be included to mitigate extreme temperature fluctuations.

Unlike other proprietary systems, the RSM30 is not constrained by a sensor manufacturer. The RSM30 has been designed to accept digital and analogue sensors over a PROFIBUS network from a wide range of manufacturers including Hach, ITT, S-CAN and Endress+Hauser.

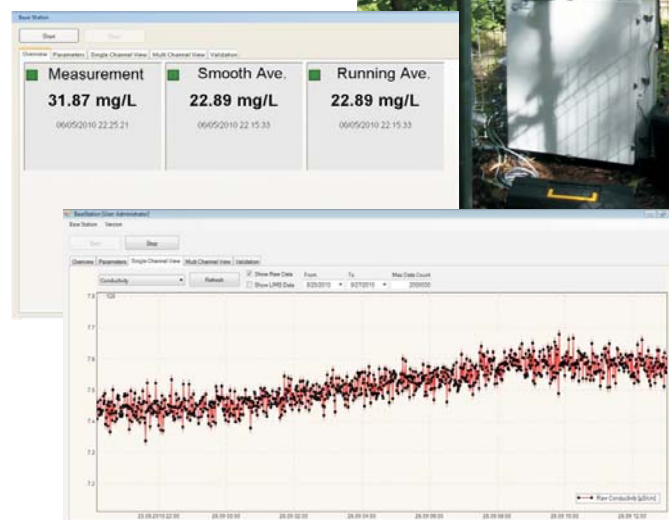
Data Input/Output

Measurement, meta, LIMS and log data are controlled by Primodal's own PrecisionNow BaseStation software. The PrecisionNow graphical user interface (GUI) is used to configure sensor inputs and data evaluation modules, as well as setup communication and data visualization. Current as well as historical time series data can be visualized inside the software singly or as multiple time series on a single graph. Or alternatively, the data can be exported in a variety of file formats including text, xml, csv or Excel files.

Internal Data Quality Evaluation Modules

- long term time series management
- data pre-processing
- data filtering (moving averages etc.)
- innovative data quality management system linked to LIMS data

MONITORED BY:



Remote Communication

Control of and communication with the RSM30 can be achieved using the wired, wireless or GSM capabilities built into the RSM30. The wired and wireless capabilities allow the unit to be connected to an existing local network if available or, if necessary, the RSM30 can be equipped with GSM capability making remote deployment a viable option. The RSM30 uses the configured communication channel to sync the measurement, meta, LIMS and log data with a central computer running PrecisionNow Server (the 'central server'). The central server can compile data from multiple stations where it can be visualized, analyzed, archived and used for any number of management purposes (website propagation, modeling, regulatory filings....)

Real-Time Data Evaluation

The RSM30 is a water quality monitoring station that not only logs and transmits real-time data, but also analyses the data at the water's edge in real-time using Primodal's PrecisionNow software. Analysis in real-time ensures that data issues and the resulting alarms are triggered quickly and efficiently, thus minimizing post-processing effort and maximizing the storage of 'clean' data.

Clean Data

The Future of Monitoring

Specifications

Ambient Conditions

- **Operation:** 0 to 55°C (-4 to 131°F);
0 to 95% relative humidity, non-condensing
- **Storage:** -5 to 70°C (-4 to 158°F);
0 to 95% relative humidity, non-condensing

Power Requirements

- 100 to 230 VAC, 50/60 Hz
Approx. Power: 200 - 500 W depending on configuration
- *Optional:* 24 VDC

Dimensions

- 750 x 900 x 250mm (30 x 36 x 10in.)

Enclosure

- Fiberglass NEMA 4
- Lockable
- Surge protected
- Fused and unfused terminals
- Cable entry gland unit
- Handles and castors for easy transport
- Optional thermostat controlled electric cooling and/or heating unit(s)

Mounting Configurations

- Surface and pipe (via mounting brackets)

Weight

- Approx. 45 kg (100 lbs.) depending on configuration

Internal PC

- Intel Atom Dual Core Fanless CPU
- Solid State Drive
- CDRW-DVD Writer Slim Slot Drive
- 10/100 LAN, Wireless LAN, serial port
- Profibus configured
- Optional display: 15", 17" or 19"
- Optional 2nd drive (RAID configured)

Communication (Optional)

- GSM cellular module
- Ethernet service port (standard)
- Wired or wireless connectivity

Data Management (Optional)

- Primodal's Secure Data Acquisition Service (SDAS)
- Automated secure data download from Primodal's servers
- Secure internet-based access to data for visualization and manual data download

Warranty

- 1yr

Acquisition Options

- Buy or lease options available

PrecisionNow Software

Software Licences (included)

- BaseStation software licence
- Server software licence

Basic Features

- User-friendly graphical user interface
- Commonly used Windows menu structure
- Configured to user specifications at time of delivery
- User configurable if new sensors added
- User accounts to ensure system integrity
- Data logging
 - » raw measurement data
 - » data quality data
 - » module output data
 - » configuration data
 - » meta data
 - » qualitative data
- Data visualization
 - » current & historical
 - » single or multiple signals

Real-Time Data Evaluation

- Built-in evaluation module toolbox
- Open-code structure for client-specific tools and modules
- User-customizable module examples
- Error checking
- Alarm triggering
- System-wide data analysis using data from multiple locations

Sensor Support

- Sensor manufacturer independent (Hach, E+H, ITT (WTW),...)
- Connect multiple sensors (theoretically unlimited)
- Supports digital & analogue signals

Software Support

- 1 yr (technical support & all upgrades)
- On-going with SDAS subscription



Primodal Systems Inc. is an environmental technology firm offering data management solutions for monitoring systems.

At Primodal Systems, we are committed to providing clean data at source to avoid the problem of managing unusable datasets later. Efficient, field-proven technology is just the beginning. To every project we also bring extensive knowledge and experience with highly successful operations around the world.

For current price information, technical support, and ordering assistance, contact Primodal

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