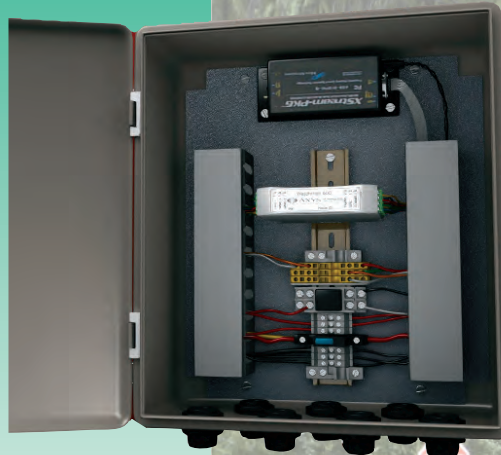


# HYDROSENTINEL™

Hydrological Monitoring System

## FEATURES & BENEFITS:

- Designed for network applications
- Remote sensor configurations and diagnostics
- Performs under harsh environmental conditions
- Expandable, modular design
- Integrates any sensor, any manufacturer
- Supports Analog, Digital, RS-232, RS-422, RS-485, CANBUS and SDI-12 sensors



# HydroSentinel™

*Setting the standard for water monitoring networks*

## HydroSentinel™

The AXYS HydroSentinel™ is a robust data collection and distribution system designed for remote hydrological monitoring networks. The HydroSentinel™ is a turnkey solution that interfaces with virtually any sensor or telemetry. Operational as a stand-alone unit or as an entire network of systems, the HydroSentinel™ allows for complete flexibility and expandability for future sensor and station additions. The HydroSentinel™ can be customized for specific applications such as flood forecasting, river and stream habitat monitoring, source drinking water protection, reservoir management, and industrial water distribution management.

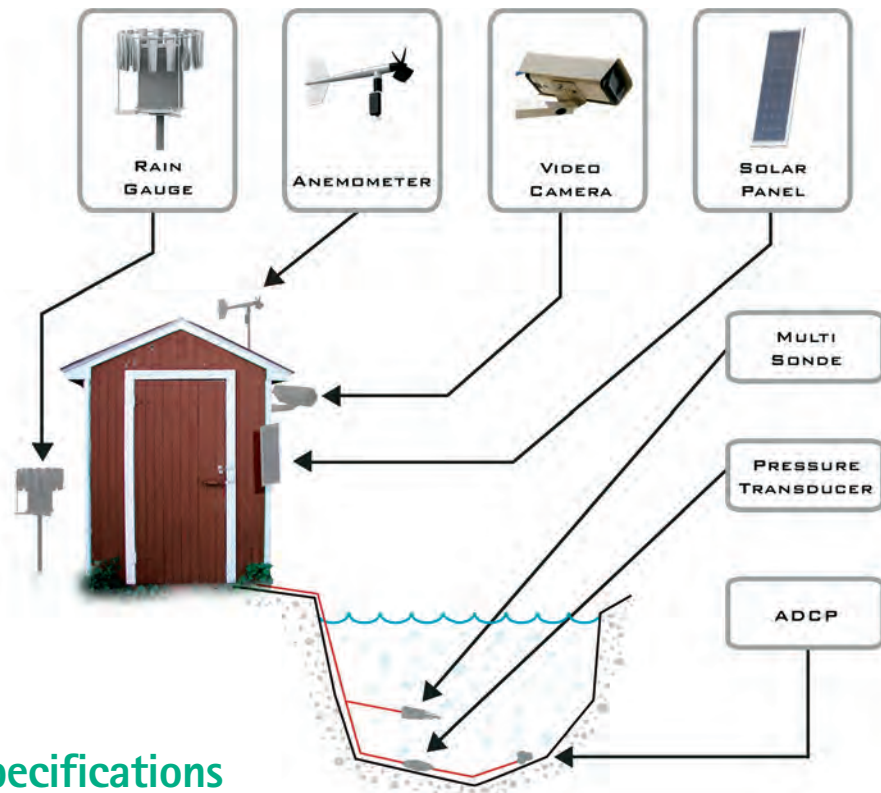
Typical sensor configurations provide water level, discharge, precipitation, and water quality parameters such as turbidity, DO, temperature, pH, and conductivity. Additionally, the HydroSentinel™ supports automated water samplers, as well as a wide array of meteorological sensors such as wind speed, wind direction, relative humidity, air temperature, barometric pressure, dew point, rainfall, and solar radiation. Designed for scalability, the HydroSentinel™'s modular construction enables the addition of new modules and sensors as your data needs grow.

Operationally, the HydroSentinel™ continuously monitors all sensors and outputs data at user-specified intervals. Data can be emailed, or posted to a web or ftp site in real-time. Telemetry choices include Spread Spectrum VHF and UHF, Iridium, Inmarsat D+, GOES, ARGOS, Globalstar, Orbcomm, cellular phone (GSM or CDMA), and landline.

The HydroSentinel™ is supported by AXYS Data Management Software (DMS) and AXYS WebView™:

AXYS DMS software is a user friendly, graphical interface that allows users to manage an entire network of stations from one central PC. Users can remotely configure data parameters and message strings, polling and broadcasting intervals, update sensor configurations, add/remove new sensors, and perform remote diagnostics.

AXYS WebView™ is an interactive, web-application that displays hydrological data. The graphing functions and viewed parameters windows can be optimized in real-time to display trends or target data. Views of both current and historical data can be readily displayed over the World Wide Web.



## Specifications

### Hardware DCP Specifications

- Distributed processing architecture
- Battery backed up real-time clock
- 4MB FLASH program memory (expandable to 8MB)
- FLASH data logging
- ECOS open architecture
- 5 x 1A switched power outputs
- 8 x 0 to 3.3 V bi-directional digital I/O

### Sensor Options

- Stage
- Discharge
- Temperature
- Turbidity
- Dissolved Oxygen
- pH
- Conductivity
- Salinity
- ORP
- Various Ions and Nutrients
- Automated Water Samplers

### Meteorological Parameters

- Barometric pressure
- Precipitation
- Snow pack
- Ice out indicator
- Wind speed/direction

- Air temperature
- Relative humidity/dew point
- Soil moisture
- Network Cameras

### Telemetry Options

- VHF/UHF spread spectrum
- Cellular/land line telephone
- Internet/Ethernet landline
- Direct serial link
- Satellite (Iridium, Inmarsat D+, GOES, etc.)

### Power System Options

- 12 VDC
- 120/240 VAC
- Solar/battery power

### Operational Environment

- Industrial temperature rating (-40°C to 85°C)

### User Interface - Application Specific

- Menu driven serial user interface for field configuration
- Remote data management, system configuration, and broadcasting abilities with AXYS DMS™ software
- AXYS WebView™ data viewing web application.



## AXYS TECHNOLOGIES INC.

2045 Mills Road West, Sidney, British Columbia Canada V8L 5X2

Phone: (250) 655-5850

Fax: (250) 655-5856

E-mail: [info@axystechnologies.com](mailto:info@axystechnologies.com)

Website: [www.axystechnologies.com](http://www.axystechnologies.com)