XynetSCADA Weather Station

Designed for low power and cost effective meteorological data gathering

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Measurements

- ✓ Ambient Temperature
- ✓ Humidity
- ✓ Wind Speed
- ✓ Wind Direction
- ✓ Barometric Pressure
- ✓ Rain Rate
- ✓ Precipitation
- ✓ Solar Radiation

Overview

From single research weather station to a mesoscale weather networks, XynetSCADA Weather Station is able to facilitate all applications to acquire meteorological data. This autonomous, solar powered solution provides accurate real-time meteorological data, consuming only a fraction of a power (low powered). We have proven reliability in extreme weather conditions making our weather stations ideal for all types of meteorological and climatological monitoring anywhere on earth.

Sensors

As part of the XynetSCADA Weather Station solution, we offer high quality sensors for measuring the meteorological parameters which is eventually interfaced with our data logger.

Temperature Sensor
Thermocouple (PN Junction Silicon Diode)

Relative Humidity Sensor
Film capacitive sensor (element) that use integral signal conditioning. RH and air temperature sensors are typically housed in a single body.

Precipitation
Tipping bucket, 0.01" per tip (0.2 mm with metric rain adapter), 33.2 in, 2 (214 cm) collection area

Wind Speed
Wind cups with magnetic switch

Wind Direction Sensor
Wind vane with high precision potentiometer

Data Logger

XynetSCADA Weather Stations measured data are stored in the programmable datalogger are often processed and stored as hourly and daily arrays (e.g., maximums, minimums, averages).

Specifications

Weather Station Unit	
Supply Voltage	6VDC – 15VDC
Supply Current	20mA
Power Consumption	0.01W – 0.3W
Operating Temperature	-40°C to 70°C
Data Logger	
Protocols	Modbus TCP (Ethernet), Modbus RTU (serial RS232 and/or RS485)
Baud rate	300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200
Ethernet Port (RJ45, 10/100BaseT)	1
Wi-Fi	Allows for 255 mobile devices (e.g. laptop, smart phone and tablet) connections
Security	Login required to configure IO parameters Event log tracks user modifications
Reports Transfer	FTP
Data Access Tool	Microsoft Internet Explorer 7.0 or higher Firefox 14 or higher Safari 4 or higher Chrome

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