

110-WS-NOVA-SAT Satellite Weather Station

The **110-WS-NOVA-SAT Satellite Weather Station** is a basic weather station that can sample four analog inputs to read a variety of sensors and four digital inputs for sensors such as rain, flow, and wind speed.

The **110-WS-NOVA-SAT** conserves power by entering sleep mode when not transmitting. It can be set to read and transmit data at user-defined intervals as well as event based reporting. Its RS232 interface connects to a satellite modem providing a link to the internet. Data plans are available from McCrometer Connect located in Hemet, CA. (See details in the [Data Plans and Services](#) data sheet).

Features

- Satellite communication provides remote monitoring from almost anywhere
- Low-power operation
- Compatible with a wide range of sensors
- Sensor excitation power (12V nominal, regulated 5V)
- High frequency (10 kHz) digital input for wind speed or flow monitoring

Applications

- Standard: Wind Speed, Peak Gust, Wind Direction, Barometric Pressure, Temperature, Humidity, Rain
- Optional evaporation pan monitoring
- Other compatible sensors – consult factory

Mounting The NOVA-SAT is enclosed in a weatherproof NEMA enclosure with hardware for mounting to a tower or tripod.



I/O Ports	4x analog in: 0-5Vdc standard (0-500uA, 0-1mA, 0-20mA with included resistors) 2x digital in: pulse counter for rain, wind run, etc. 2x frequency in: 10 kHz max, 10ms minimum pulse width for wind speed, flow, etc.
Communications	Iridium satellite module, 1616 MHz to 1626.5 MHz, 3dB ground plane independent magnet mount antenna with 5' (1.5 m) cable
Resolution	10-Bit @ 0-5V
Sensor Excitation	Switched unregulated battery (12V nominal), regulated 5V
Sampling Interval	Programmable, seconds to days
Connectors	12x Screw terminal
Power	12V @ 13mA sleep mode, 130mA (average) satellite transmit mode
Battery / Charger	Sealed lead acid 12V, 7Ah / 100-240 VAC float battery charger mounted internally
Temperature Range	Operating: +14°F to +185°F (-10°C to +85°C) Storage: -58°F to +185°F (-50°C to +85°C)

Ordering Information

110-WS-NOVA-SAT	Satellite Weather Station including: Wind speed and direction sensor with 40' cable (200-WS-02FA) Barometric pressure sensor with 18" cable (110-WS-25BP-12) Temperature / humidity sensor with radiation shield and 40' cable (110-WS-25THA) Rain gage with tower mounting arm and 60' cable (110-WS-25RG)
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Optional

630-5000-006BA	Solar panel with regulator, 600 mA (10 watt)
110-WS-25TM	5' Tripod & 5' sensor mast
110-WS-25TM-P	3' Tripod & 6' sensor mast assembly with carrying case and tie-down