

Automatic Wind Monitor



“ Virtual” make Automatic Wind Monitor is a fully computerized, digital and self contained power source system, fitted with Data Logger and battery charging solar panel with rechargeable, maintenance free batteries complete with sensors mounted on a tripod stand with sealed waterproof enclosure for Data Logger, Solar charger and battery. All Sensors powered directly from Data Logger and no need of external power source (until specified). Standard System comes with facility to transport Data from Data Logger to a P.C. through a pocket able data shuttle. 16x2 alphanumeric display and 4x2 membrane keypad is provided at front panel of data logger for programming data logger and monitoring sensor reading at site without the help of computer.

Features:

- Display: 16 Characters X 2 Lines alphanumeric display,
- Keyboard: 4x2 membrane keypad for onsite programming of data logger.
- Measured Parameter – **Date, Time, Wind Speed, Wind Direction, & Battery Voltage.**
- Real Time Clock accuracy: Internal with ± 2 minutes / year & leap year
- Number of Channels: 8 can be extendable upto 16 channels (at extra cost).
- Channels Configuration: Factory configured sensors as per purchase order.
- Logging Interval: 1 min to 24 Hr program log Start time within next 24 hours
- Data Storage: store 1 year data at user’s selectable 1 hour logging interval.
- Operating Temperature: - 40 to 75 °C. Humidity: 0 to 95 % non-condensing.
- Power Supply: 12V SMF battery, Charging: Solar Panel / 220V AC (Optional).
- Battery Life: More than 1.5 Years (Easily Available in local Market)

- Solar Panel:: 12 Volt DC, Wattage: 10, 20 & 40 Watt (as per system power requirement)
- Mast: **Default**-Stainless Steel Tripod (SS). **Optional** – 3M SS /6meter GI Mast (at extra cost)
- Data retrieval: Data shuttle (default) to Computer. Other options also available (at extra cost).

Other options: Ethernet, 2G/3G/4G enabled Web based telemetry at Virtual’s Portal “www.ehydromet.in”.

Application Software (Virtualware)

This is a user-friendly, Menu Driven, Windows based software allows you to view & save collected data from data logger to computer/laptop. Data file is saved in Microsoft’s Excel format. Also available with data file generation for Windrose Software (at extra cost)

Wind Speed Sensor

- Sensitive DC generator outputs horizontal wind speed
- Constructed with lightweight and UV resistant plastic cups
- Supplied with an aluminum mounting bracket with 2 holes for screws.

Speed Range: approx. 0.5 m/s to 67 m/s

Accuracy: Better than 0.5 m/s

Resolution: 0.1 m/s

Material:

- Cups: one piece injection-molded black polycarbonate
- Body: housing is black ABS plastic
- Shaft: Stainless Steel, fully hardened
- Bearing: modified Teflon, self-lubricating

Wind Direction Sensor

- Zero dead band. Many potentiometer wind vanes have a dead spot of several degrees. This device has no dead band at all.
- Near-zero friction. Since the magnet is not in contact with the Hall sensor, there is no friction from the sensor.
- Virtually infinite life. Unlike potentiometers that wear out, the magnetic Hall sensor is non-contacting and should theoretically last forever.

Range: Full 360 degrees , zero deadband

Accuracy: +/-0.3 to 0.5% of signal range

Resolution 1.0 degrees

Material:

- Vane: one piece injection-molded black polycarbonate
- Body: housing is black ABS plastic
- Shaft: Stainless Steel, fully hardened
- Bearing: modified Teflon, self-lubricating

Ordering Guide:

SN	Description	(With SS1 small Tripod Stand) Model No.	(With SS Tripod Stand) Model No.	(With GI Mast) Model No.
1	Wind Monitor with Data Shuttle option	WM-VH-SS-D	WM -VH-SS2-D	WM -VH-GM-D
2	Wind Monitor with Ethernet option	WM -VH-SS-E	WM -VH-SS2-E	WM -VH-GM-E
3	Wind Monitor with GPRS Web Telemetry	WM -VH-SS-GPRS	WM -VH-SS2-GPRS	WM -VH-GM-GPRS



Represented by: