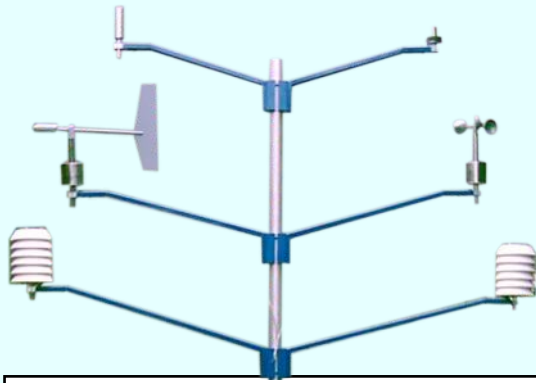


# AUTOMATIC WEATHER STATION



Today, the measurement, processing and analysis of meteorological data requires a high degree of measurement instrument precision and an optimal adaption of the data acquired to the task at hand. Our instruments and systems fulfill in all respects to extensive level of accuracy. Weather data analysis without Computer aided measurement & logging is unthinkable today. We develop complete for all essential or optional components as per customer's requirement. The sensors are fixed on suitable mast (2 m, 5 m, 10 m) according to requirement.

The **TEMPERATURE SENSOR** with electronic circuitry housed in a protective enclosure. The **HUMIDITY SENSOR** consists an electronic circuit in the enclosure converts the capacitance to a voltage output which is linearly proportional to the ambient relative humidity. Both sensors elements kept within the radiation shield to protect the sensor from direct exposure to sunlight, extreme wind, rain, dust etc.

The **3 CUP ANEMOMETER** is a general purpose wind speed measuring instrument using 3 rotating cups. The frequency generated is proportional to the wind speed. The **WIND VANE** is used for obtaining precise measurements of wind direction. The counter-balanced lightweight aluminum vane assembly with a precision potentiometer gives signal that is proportional to the wind direction. The **SOLAR RADIATION** sensor is made of Photovoltaic cell which has spectrun if short wave radiations. The **BAROMETRIC PRESSURE** sensor is made of piezo-electric sensor with temp. compensation for accurate measurements.

The Datalogger is using Advanced Microcontroller system & Inbuilt Real Time Clock with battery backup. The Data can be logged at specified interval set by User. (i.e. every 30 minutes). 512 KB Memory suitable for 16000 Readings suitable for approx. 10 months of data @ 30 minutes interval. 8 Analog Input channels, 5 Digital Inputs. Having Internal/external 12 V SMF Battery for Backup in case of MAINS power failure. Optional Solar Panel Recharging of Battery for Remote locations. 20 x 4 Alphanumeric Display for instant Data reading & Settings. To transfer to data to a PC, RS232 port is inbuilt.

PARAMETER	RANGE	RESOLUTION	ACCURACY
Temperature	-20° to 60° C	0.1° C	0.2° C
Relative Humidity	0 to 100 %	1 %	2 %
Wind Speed	0 to 54 m/s	0.1 m/s	2 %
Wind Direction	0 to 359 Degree	1 Degree	5 Degree
Barometric Pressure	880 to 1080 mb	0.1 mb	0.5 mb
Solar Radiation	0 to 1800 W/m2	1 W/m2	1%

\* All pictures are for illustration purpose only. Dimension & Design may vary as per modification of datalogger systems.



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Mfg. of : Hydrological, Meteorological, River Gauging & Weather Equipments

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