

Automatic Weather Station : OBSERV-MET



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Basic Description: Specifically designed meteorological Equipment to cater all the present day requirements of Meteorological observations. Its low power operation makes it suitable for remote Data Acquisition applications. The LCD display along with user friendly interaction menus makes the settings, configuration and viewing the stored data very easy for the user. User can continuously view and monitor all the readings on the display or can view the stored data values on the PC by retrieving the stored data. The stored data can be directly printed on a stand alone 80 column Dot Matrix Printer interfaced directly to the Observ-Met.

The in-built GPRS system connects the Observ-Met to the entire world. The Observ-Met transmits the stored data to Web site after predefined interval, sends the data over e-mail, or through SMS

Specifications:

Inputs:8 Analogue Inputs namely – Temperature, Humidity, Wind Direction, Wind Speed, Barometric Pressure, Solar Radiation

2 Serial Inputs for interfacing

Four Digital Inputs for interfacing sensors like Tipping Bucket Rain Gauge Sensor

Display & keyboard:16 Character x 4 Line Alphanumeric LCD display as HMI and to indicate run time values of all the parameters. In-built 5 multi-function keys for HMI. All the necessary settings and calibrations can be carried out using this keypad.

A to D Converter : More than 16 bit ADC, all channels sampled once a second

Data Storage :1 minute average of all the parameters stored

Vector average of Wind parameters stored

Data stored with respect to real time along with time stamp along with station ID

One month data storage in the internal flash memory

Outputs : One USB port provided to retrieve data on an External USB stick.

Two numbers of RS232 ports for interfacing various sensors

One RS422 port to connect PC or slave displays at long distance.

A parallel port for Dot Matrix Printer provided for print output

Optional GPRS connectivity for transferring the stored data directly to the Website or to an e-mail

Optional GSM connectivity for transmitting the alarms or instantaneous data over SMS

PC Software : Suitable PC software provided to download / Transfer and view logged data on PC. Software can export the data in MS Excel format.

Power Supply: System operates on 12 VDC SMF battery. Current drawn is less than 100mA.

Application Areas: Weather Monitoring areas like – Agricultural Institutes, Monitoring System for air polluting industries, Various power stations, Dams, Solar & Wind Power generating plants