

DATA LOGGER SYSTEM FOR AUTOMATIC WEATHER STATION

Data logger for automatic weather station is indigenously developed with state of art technology. Designed to meet WMO "DATA QUALITY" guidelines. Utilizes high precision and accurate signal conditioning methods. Data logger can be interfaced with

wide variety of sensors:

1. Temperature
2. Relative humidity
3. Atmospheric pressure
4. Wind Speed & direction
5. Solar radiation
6. Rain
7. Leaf temperature
8. Leaf wetness
9. Soil temperature
10. Soil moisture
11. Carbon dioxide
12. Rain detector
13. Visibility



SALIENT FEATURES

- ◆ High accurate measurements
- ◆ Configurable time intervals for data logging 1 sec & above
- ◆ Data transfer to multiple data servers
- ◆ Data transfer through SATELLITE / GPRS / Wi-Fi / ZigBee / RS232, 485
- ◆ Supports HTTP / IEEE1888 / TCP / UDP / User specific communication protocols
- ◆ Retransmission of failed data upon network availability
- ◆ Watch dog functionality
- ◆ Configurations of AWS dataloggers, through webserver. (resetting / time config / sampling intervals / stored data retrieval from datalogger can be done using web / internet)
- ◆ Sleep mode functionality for power saving.
- ◆ Data quality validation using WMO QC methods
- ◆ 2GB Memory backup (expandable up to 8 GB)

DATA LOGGER SYSTEM FOR AUTOMATIC WEATHER STATION

DATA LOGGER SPECIFICATIONS

Processor	: 32 bit ARM
ADC Resolution	: 16 bit or better
Conversion Accuracy	: ± 1 LSB
Operating Temperature range	: -40°C to + 60°C
Battery Backup (RTC)	: Internal Lithium Battery with 10 years operation / rechargeable
Real-Time Clock	: Internal with GPS synchronization
Watchdog Timer	: Available for system reset upon system abnormalities
Sample Intervals	: Programmable in 1 sec intervals
Visual display	: LCD
User interface	: Menu driven keypad
Data Transfer Modes	: RS232 / 4 85 / GSM / GPRS / Wifi / Ethernet / Zigbee / Satellite
Sensor Interfacing Ports	: RS 232 - 2 No. (expandable) RS 485 - 1 No. (expandable) Digital Inputs - 8 No. (expandable) Frequency - 4 No. 4-20 mA - 2 No. Analog Inputs - 16 No. SDI12 - 1 No.
Data backup retrieval	: USB2.0 / through laptop using RS232
Data logger configuration	: Through laptop with RS232 / Wifi / Bluetooth / Internet
Operating Voltage	: 12V DC
Additional Features	: Configuration of datalogger through tablet / smart phone can be provided Supports ubiquitous green community control network protocol

APPLICATION SOFTWARE

Features:

1. Data can be retrieved from the datalogger through Laptop / PC locally
2. Configure the datalogger for new versions of software, new sensors, sampling rate change and other user defined requirements
3. Graphical representation of the data

APPLICATIONS

- ◆ Meteorology
- ◆ Hydrology
- ◆ Urban Infrastructure Management
- ◆ Industries
- ◆ Agriculture
- ◆ Flood and Drought Monitoring
- ◆ Insurance
- ◆ Pollution Monitoring
- ◆ Evapotranspiration stations
- ◆ Avalanche Monitoring

* **Disclaimer:** Product specifications and data are subject to change without notice to improve Reliability, Function or Design or Otherwise

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