



PROlog - Professional Meteorological Station

PROlog datalogger is based on combination of latest technology - ultralow power microcontroller with high precision analog converters and real time multitasking operating system. It gives flexible and reliable continuous operation.

Analog front end offers 8 inputs with 12 bit resolution (relative humidity, wind direction) and 12 inputs with 24 bit resolution for precision measurements (temperature, solar radiation, pressure...). On 8 digital inputs user can measure frequency (wind speed), period of time (sunshine duration) or select counter (raingauge). User can setup upto 8 serial intelligent sensor (US wind sensor, ...) All inputs are software configurable and offer basic statistics - average, minimum and maximum. 16 user defined polynomes are used for calculation to engineering units. Basic battery (12V Pb) management is provided on board. Overcharge and deep discharge is controlled. As a source of power can be used

CHARGER, SOLAR, or just any DC source in the range of 4-24V. Internal memory of about 4MB and SD memory card are used for data logging. SD card upto 32GB is supported. Real time clock with 3V lithium battery is backedup. Time precision is achieved by time synchronization once a day over GPRS network with world wide time zones.

Remote data transfer is supported by software via email or FTP with integrated 2G/3G/4G modem.

Parameters

Analog Inputs	
Single Ended (12bit)	8
Differential (24bit)	12
Input Range	0...2.5V to -19...+19mV
Accuracy	0.1% to 0.05%
Input Noise	< 0.1 uVef
Input Offset	< 0.5uV
Digital Inputs	8
Input Range	0...2kHz
MeasInterval	1...3600 s
LogInterval	1...3600 s

Applications

- professional meteorological networks
- solar and wind power systems analyses and evaluation
- pollution monitoring
- environmental protection
- industrial waste management
- flood early warning
- research, education
- calibration systems

Statistics	Avg, Min,Max, StDev
Ratiometric measurements (for 4 wire PT100 precision connection)	
Excitation for PT100	2xca 0.5mA
Internal Memory	4MB
Data Storage Medium	SD card upto 32GB
Comm ports	RS232, RS485, USB (service), (4xRS232)
Baud Rate	300..115kbps
Realtime Clock	built in Time Sync via GPRS connection once a day
Time Zone	worldwide
Backup Battery	3V lithium
Indication	3 LEDs
Battery Management	12V Pb Deep discharge protection Overcharge protection
Charging inputs	
POWER	5...12Vdc
SOLAR	12V system
Power Consumption	
Sleep	40uA max
Measuring	15mA typ
Remote Data Transfer	Full support for email or FTP data transfer using internal 2G/3G/4G modem
Temperature Range	-30...+60°C
Protection	IP65
Customization	on request