



Applications

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

EasyLogGSM - low power precision datalogger

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

Analog front end offers 4 inputs with 12 bit resolution (relative humidity, wind direction...) and 4 inputs with 24 bit resolution for precision measurements (temperature, solar radiation, pressure...). On 4 digital inputs user can measure frequency (wind speed), period of time (sunshine duration) or select counter (raingauge). Upto 8 serial RS232/485 sensors can be defined. All inputs are software configurable and offer basic statistics - average, minimum, maximum and stdev. 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 4-20V.

Internal memory of about 4MB and SD memory card are used for data recording.

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 using integrated quad band GSM/GPRS modem.

Parameters

Analog Inputs	
Single Ended (12bit)	4
Differential (24bit)	4
Input Range	0...2.5V to -19...+19mV
Accuracy	0.1% to 0.05%
Input Noise	cca 0.2uVef
Input Offset	0.5uV max
Digital Inputs	4
Input Range	0...2kHz
Serial Sensors	8
MeasInterval	1...3600 s
LogInterval	1...3600 s

Statistics	Avg, Min, Max, StDev
Ratiometric measurements (for 4 wire PT100 precision connection)	
Excitation for PT100	cca 0.5mA
Internal Memory	4MB
Data Storage Medium	SD memory card
Communication ports	RS232, RS485
Baud Rate	300..115kpbs
Realtime Clock	built in
Time Synchronization	via GPRS connection once a day
Time Zone	worldwide
Backup Battery	3V lithium
Indication	2 LEDs
Battery Management	12V Pb Deep discharge protection Overcharge protection
Charging inputs	
POWER	5...12Vdc
SOLAR	12V system
Power Consumption	
Sleep	40uA max
Measuring	7mA typ
Remote Data Transfer	Full support for GPRS email and FTP data transfer
Temperature Range	-30...+60°C
Protection	IP65
Customization	on request