EARLY WARNING TELEMETRIC SYSTEM

WATERLOGGER® EWS

Telemetry station for early warning and data transfer from intelligent sensors Leveloggers and many other hydrogeological and meteorological sensors.

MAIN FEATURES

- Compact and durable housing IP65
- Double data back up
- Two-way remote communication GSM/GPRS
- Changes to station parameters through internet
- Barometric in-built sensor
- Channeling data to user server or to internet application EnviroDATA
- Possibility to connect many meteosensors, tensiometers, soil moisture sensors, radar and other special sensors
- Wireless data transfer to user server or to an internet EnviroDATA application
- SMS message if limit values or gradient are exceeded
- Warning emails if limit values or gradient are exceeded
- Competitive price, software free of charge
- Warranty period 24 months

TYPICAL USE

- Water level measurement, temperature, and electrical conductivity of both surface and ground water
- Limnigraphic stations and anti-flooding warning systems EWS
- Weather stations extended for example by soil hydrology sensors
- Pumping tests – SMS message when reaching required water level
- Other applications where data logging and telemetric station with warning message is required

ENVIRODATA®

- Web application for easy management of measured data from automatic telemetric measuring stations, equipped by remote data transmission system
- Comfortable access to data from any computer connected to internet
- Clear display of data in a table or graphs within a certain period of time
- Pre-processing of data, statistic functions and comparison of graphs
- Simple export of data for further processing
- Changes of station parameters through internet
- Demo for free trial

Ekotechnika® spol. s r.o.
Environmental diagnostics equipment

Ekotechnika spol. s r. o.
Mokropeská 1832
252 28 Černošice by Prague
Czech Republic

Contact us at:
+420 251 640 511
info@ekotechnika.cz
www.ekotechnika.cz

Telemetric systems WaterLogger® EWS (Early Warning Systems) are devices for wireless data transfer from connected sensors to a user PC or server. Measured data which can be transferred are: water level, water temperature, water elec trical conductivity, barometric pressure, rainfall, all meteorological parameters, soil moisture, soil temperature, soil matrix potential, and many others.. Communication is two-way using an integrated GSM modem.

Wireless data transfer via internet to an e-mail address or FTP server is a method which does not require any additional equipment besides a PC. Users who appreciate convenience can use our web database EnviroDATA® for configuring their telemetric stations and receiving and visualizing data.

WaterLogger® EWS is a very energy-efficient due to minimal consumption of electricity (both in sleep mode and measuring mode). Therefore the WaterLogger® EWS is capable of measuring and transferring data many months in the field without charging or changing the energy supply battery.

WaterLogger® EWS (Early Warning System) has the possibility of sending warning messages if the measured parameter exceeds a user defined threshold or gradient of chosen parameters. Water level can be measured by two meth- ods - ultrasonic sensors or radar sensors.This situation is immediately reported to the respon- sible persons on alert via SMS. Along with pres sure or ultrasonic level sensor and rain gauge, WaterLogger® EWS is ideal for early warning systems against floods and torrential rain.

TECHNICAL SPECIFICATION	
Single ended analog inputs	4 inputs, 2.5 V range, 12 bit resolution
Differential analog inputs	4 inputs, ±19 mV to 0–2.5 V range, 24 bit resolution
Digital inputs	4 inputs, 0–2 kHz, max +15 V
Interface	RS485 (intelligent sensors)
Indirect barometric pressure compensation	integrated barometric sensor
Calculation to engineering units	Polynomial a+bx+cx^2+dx^3
Max no. of polynomes	16
Measuring interval range	10...3600 s
Logging interval range	10...3600 s
Modem interval range	0...24 hr (data transfer)
Internal modem	quad band GSM/GPRS modem
Data transfer method	two way wireless by email, FTP
Internal memory	512 kB for data
Memory card	SD or SDHC card
Communication	1 × RS232/485 port 1 × RS232 for sensors (customized)
Communication speed	serial 1 up to 115200 bps, 8N1
No. of controlled outputs	1 × switching power supply for sensors 1 × switching 2.5 V (stabilized)
EWS system	4 level warnings 1 gradient warning 1 low battery voltage warning
SMS phone numbers	up to 8
SMS text	user definable
Time adjustment	automatic by time servers
Power supply voltage	4–24 VDC
Energy supply methods	rechargeable battery 12 V (integrated charging system for solar panel or adapter 230 VAC/12 VDC)
Dimensions	178 × 143 × 56 mm
Temperature range	-40 to +60 °C
Protection class	IP65