WebLog

Electronic system of measure, automation data-logging e GSM/GPRS tele-alarm

Product description

WebLog can store the measured value from 4 analog channels and 8 digital channel. The system is expandable through a connection to the RS485 BUS of distributed I/O. Allows the remote control of automation plant through the versatile connect capability:

- Analog inputs for sensors with 0/4...20mA, 0...5/10V o Ptc/Ntc
- Optoisolated digital inputs 0...32V for event logging or pulse counting
- Storage instantaneous, minimum, maximum and averge value
- Each record includes the data value, date and time of sampling
- Clock and calendar with buffer battery
- Storage capacity a maximum of 14.336 samples expandable to 30.720
- Interval sampling resolution settable from 1 minute to 65535 minutes
- System with integrate modem GSM/GPRS dual o quad band for data transmission
- Plastic case for DIN bar
- Intuitive configuration and data analysis through the PlantManager software
- Data export in text, excel or XML format
- Linearization of the measurement with the scale range set
- Sending SMS e/o e-Mail alarm
- Easy local or remote programming control unit or any connected sensor
- ModBus RTU standard communications protocol via RS232, RS485 or Ethernet

Applications

- Temperature, humidity, pressure, flow, level and other analog signals data storage
- Temperature monitoring: storage and transport temperature measure
- Sewage liftings
- Scooping and irrigation plants
- Water supply
- Data measurement from water cleaners
- Rivers, wells, reservoirs measurement
- Recording of time-activity
- Access control
- Underpasses, culverts, drains and spillways data monitoring
- Flow recording by analog signal integration
- Automatic recording and automatic storage of data measured
- Digital alarm or exceeded the threshold on analog measurements, notification
- Counting and totalization application
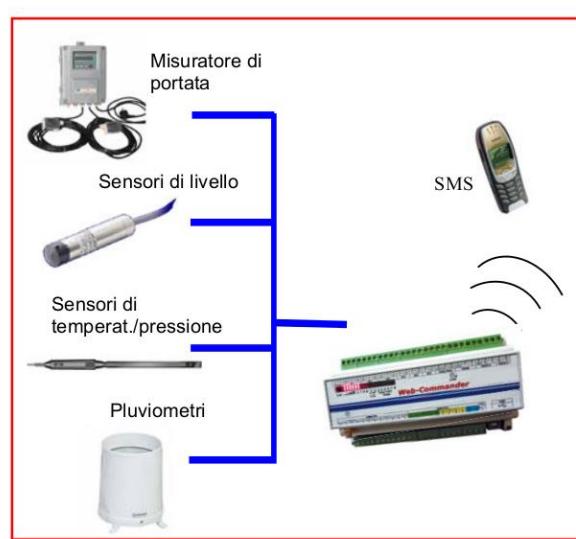
Fig.1 Esempio applicativo misure da sensori

Internet Connection

WebLog has a internal WEB server that allows to display the plant state and the setup of parameters application.

You can also send data to portals and web site using the GPRS connection. That allows considerable saving on the data transmission cost.


Vasca di sollevamento

Centro di controllo
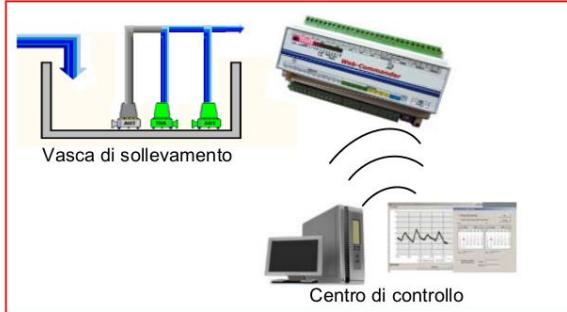
Fig.2 Esempio applicativo sollevamento

Programming and supervision

WebLog is equipped by a software for the programming and the supervision by which, the programmer is able to set up the system quickly and the user to have the real time under control system.

The configuration: DevTool

DevTool is a software based on graphic simple and intuitive interface, thanks to which you can set up inputs and outputs, users, alarms, the datalogger and relative sampling times.

Furthermore DevTool allows to define the alarm events, the messages and the notification modes.
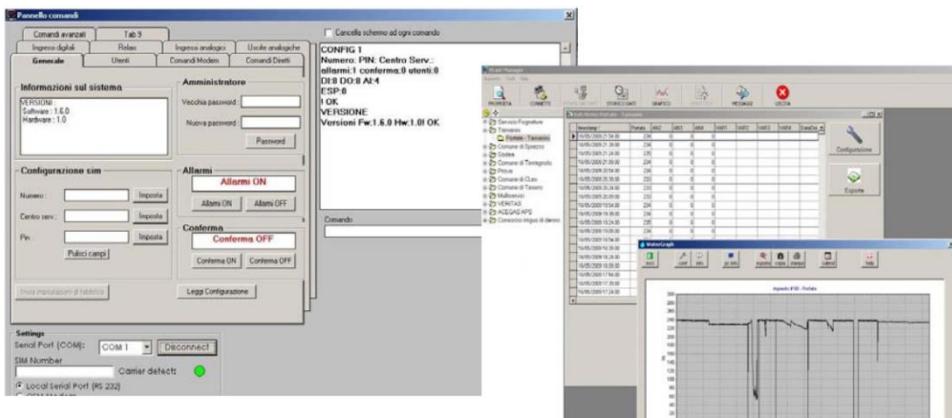
The supervision: PlantManager

PlantManager is a software which allows:

− realtime systems monitor through the synoptic pages creation
− receive the alarms and the historical data of the peripheral units
− display the historical data in tabular or graphic format
− plan a traceableness calendar of the operators assigned to the maintenance
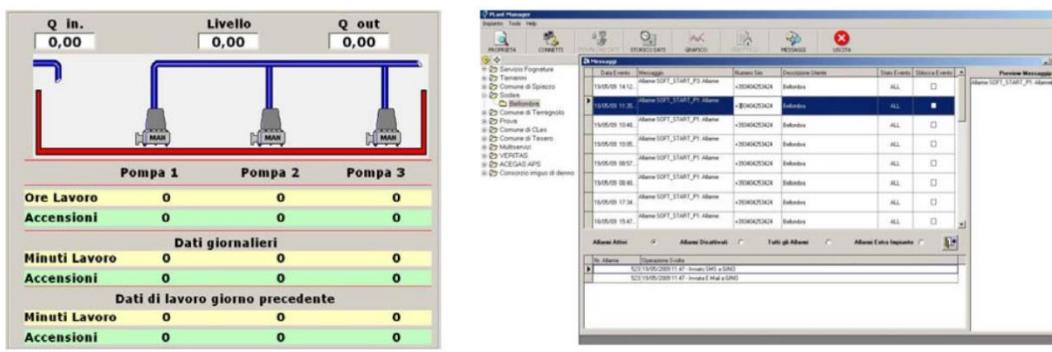
Specifications

CPU
- 16 bits CPU
- 4MBytes Flash ROM
- 512 KBytes RAM
- 128 kBytes EEPROM expandable to 256kBytes
- Internal buffered RTC
- N. 1 RS232 serial port (config./ModBus)
- N. 1 USB port
- N. 1 RS485 serial port (ModBus)

I/O
- I/O LEDs indicator
- 8 optoisolated digital inputs (0÷24V)
- 6 relè outputs
- 4 factory configurable analog inputs (0÷5V, 0÷10V, 4÷20mA HART, PTC/NTC)
- 2 analog outputs 0÷5V
- optional ethernet interface on board 10/100Mbit

MECHANICAL
- Plastic IP41 case for DIN bar
- Dimensions: 157 x 86 x 58 mm
- SMA antenna connector

POWER AND CONSUMPTION
- Power 9-32VDC/12-24VAC
- Average consumption at 24V: 85mA, 140mA in transmission

DATALOGGER
- 14336 samples measure
- 30720 samples measure with memory expansion
- Interval sampling resolution from 1 minute to 65535 minutes
- Possibility to select which analog signals must be stored
- Memory circular buffer to don't delete the already downloaded data
- Log of digital input only if changes the state
- Automatic data sending to WEB portal
- Remote data download by modem using PlantManager software

MODEM
- Dual or QuadBand GSM modem, 900/1800 and 850/1900 Mhz
- SMS, CSD, HCSD e GPRS
- Compatible with AT standard 07.07 e 07.05 commands
- Full Type Approved for phase 2+
- Voice, SMS, data and fax
- Internal SIM case

ENVIRONMENTAL
- Operating temperature: -15°C ÷ +55°C
- Relative humidity: from 0 to 80% without condensate
- Compatible with AT standard 07.07 commands

Accessories

- Digital and analog expansions connectible to RS485 bus
- Remote I/O on RS485 bus
- High gain signal directional antennas
- USB interface for data storage in pen memory
- Power device
- GPS receivers
- Signal conditioner for probes and sensors (PT100, PT1000, NTC)
- Display touch screen 5,7"

Connections

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
+	−	NC	C	NO	NC	C	NO	NC	C	NO	C	NO	C	NO	C	NO	GND	AO1	AO0	GND	−	+	GND	RX	TX	RX	TX
POWER		RL1			RL2			RL3			RL4		RL5		RL6		Analog Output						RS485			RS232 B		RS232 A

S M __=≡≡ C T R B | 1 2 3 4 5 6 7 8
● Off Digital Input
● On Relais

WebLog

Analog Input												Digital Input										N.C.		USB
V$_{ALIX1}$	AI1	GND	V$_{ALIX2}$	AI2	GND	V$_{ALIX3}$	AI3	GND	V$_{ALIX4}$	AI4	GND	C	DI1	DI2	DI3	DI4	DI5	DI6	DI7	C	DI8	C		
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	