

HYDRO 500



DATALOGGER FOR ALL TYPES OF SENSORS

FIELDS APPLICATIONS

Industrials plants, tanks and reservoirs, rivers, groundwater, hydrology, hydrogeology, hydrometry, meteorology, environmental control,...

APPLICATION

HYDRO 500 is a datalogger designed to be used in fields such as Level measurements, meteorology and all environmental applications. The main features are datalogging, processing, control, memorisation and transmission of the environmental data measured.

SIMPLE AND EFFICIENT

HYDRO 500 differs from other datalogging systems by its modularity, easy use, the large numbers of communication facilities and also its large number of inputs and outputs.

The datalogger HYDRO 500 has extended communication capacities with the outside world / TCPIP, RS 232 (and 2 others for reserve), IP (RJ 45) and 1 Radio/GSM/GPRS (option).

Its keyboard and backlitged display (option) allow local measurements reading at any time.

Low power consumption

The datalogger is always asleep except during datalogging and communication time . It is ideal for remote areas survey.

Communication

You can either communicate with HYDRO 500 in master mode (self –management of the apparatus) or slavemode.

Memorization

- Historical measurements, events and pictures are stored in a circular memory (Fifo)
- Datalogging intervals can be set individually for each channel from 5s to 1 day
- Logged data are set according to a same start/date time. This allows synchronizing of several HYDRO 500 datalogger together

Sequencing

- Automatic clock synchronizing
- Datalogger awakening on alarm, modem communication , SMS reception, RS232, Ethernet

Communication ports

- RS232, Ethernet, RTC / GSM / GPRS / Radio modem
- Network serve, our HYDRO PC software, web or display/keyboard

MODULAR DESIGN

Datalogger are delivered with or without IMH (keyboard/display)

2 models are available:

- HYDRO 500 : 18 Inputs/Outputs
- HYDRO 500 + : 37 Inputs/Outputs



MAIN FEATURES	HYDRO 500	HYDRO 500 +
16 BITS ANALOG INPUTS -Internal temperature measurement -Power supply input voltage measurement -Clock backup battery voltage measurement -Other : free use Voltage input : 0-10V / Current : 0/4-20mA Temperature : PT100	1 1 1 2	1 1 1 5
16 BITS ANALOG OUTPUTS Can be remotely controlled	0	1
LOGICAL OUTPUTS Time interval/ remote control Voltage : < 240 VAC / Current : < 8 A	6 (3 relays + 3 electronics)	15 (8 relays + 7 electronics)
LOGICALS INPUTS	3	8
COUNTING INPUTS Scheduled reset mode Free use: count up to 5 pulses per sec + or -	2	2
SERIAL PORTS RS 232 /422 For smart sensors	1 (To connect up to 30 sensors)	
SERIAL PORTS RS232/485/422 For smart sensors	1 (To connect up to 30 sensors)	
ETHERNET PORT RJ 45	1 To connect an IP movie camera (only take pictures)	
ETHERNET Link (communication)	1	
SDI 12 PORT	1 (to connect up to 30 sensors)	
ACCURACY	0.1 % FULL SCALE AT 20°C	
SENSOR POWER SUPPLY	1 to 5 s	
MEMORY SIZE	10 months for a rate of 10 measurements/minute	
Combinaison of physical and virtual inputs treated as standard input	VIRTUAL INPUTS (100)	
CONVERSION RULES	Linear interpolation: $y=Ax + B$ Non linear interpolation: $y=Ax^3 / 2 + Bx^5 / 2$ Temperature compensation : $z = (A + By) x$ Linear combination : $z=Ax + By$ Experimental curve: 20 points	
POLYCARBONAT ENCLOSURE	200 X 200 X 140 mm	
HUMIDITY SAFETY CLASS	IP 44 < 80 % non condensing	
WORKING TEMPERATURE RANGE	-40°C à + 60°C (storage and measurements)	
DISPLAY (optional) 2 models available	SENSITIVE KEYBOARD / BACKLIGHTED / MULTI LANGUAGE / LCD COLOR DISPLAY : QVGA 3,5 " (320X240) or VGA 5.7" (640X480)	
SERIAL PORTS	RS232, ETHERNET / MODEM RTC / GSM / GPRS / RADIO	
POWER CONSUMPTION	9 mAh except communications, except local IHM, on the basis of 1 acquisition by channel every 10 minutes	
REAL TIME CLOCK	DRIFT <2PPM: set on UTC universal time and synchronized with a NTP serve	
POWER SUPPLY	Power supply connector 9 to 30 VDC (12V nominal)	

The characteristics and the specifications engage our company only after confirmation.



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