

# MINILOG

## Data acquisition system



### Description

The MINILOG data acquisition system designed by SIM STRUMENTI is a compact and economic data logger meeting all fields requirements and perfectly match to all SIM STRUMENTI instruments. The MINILOG is available in three standard versions, connectable with a variety of instruments, thus providing an excellent quality-price ratio.

The MINILOG is powered by a 9V battery that provide to switched power for most of the connected sensor as well. The internal battery life is guaranteed for 7 years in standby mode, while in the acquisition mode the battery life is dependent on the acquisition interval and the types of instruments connected (example: for 4 displacement sensor with 6hrs recording interval, the data logger will last 3 years). If necessary, it is possible to connect an external power supply.

The acquisition time interval is programmable from 10 seconds to 24 hours. The "Scan" function, in order to control the threshold alarm limit, is programmable from 10 seconds to 24 hours. The "Warm Up" function switched power to the instrument from 1 to 60 seconds (programmable) before the actual readout, in order to data stabilization.

The data is stored onto the solid-state memory, which has a storage capacity for 32000 data. SIM STRUMENTI offers a special Switch unit mod. ML-SW that can be connected to the MINILOG in order to connect eight MINILOG, achieving 32 channels. In this case the communication would be via serial for all data loggers.

A modem can be connected either to the MINILOG or to the Switch unit.

The MINILOG is housed in a rugged enclosure in polyester glass fibers reinforced, IP65 whose dimensions depends on number of channels and/or required accessories.

The VEDO software supplied with the data logger enables a perfect management process data on-site or for remote control.

### Applications

Connected to piezometers, multipoint borehole extensometers with displacement sensors, inclinometers, conductivity sensors, meteorological stations etc.



# MINILOG

## Data acquisition system

### Technical features

Model	<b>ML-4CH</b>	<b>ML-PT</b>	<b>ML-PTX</b>
Nr. of channels	4	2	2
A/D	16 bit	8 bit	8 bit
Input 4-20mA	•	-	-
Input ±2V	•	-	-
Input ±200mV	•	-	-
Input PT100	-	•	•
Counter Pulse	-	8 bit	8 bit
totalizer	-	16 bit	32 bit
Input ±5V	*	-	-
Input ±20mV	•	-	-
Test	•	•	•
Alarm output	•	-	-
Alarm	Pulse +V e/o Message SMS (via modem)		
Warm Up	•	•	•
Stored phones number	6		
SMS messages	1 for every channel + 1 main message		
Internal Power	Battery 9V 1200Ah		
External Power	9-24Vcc		
Memory per channel	8190 data	16000 data	8190 data
RS232/USB**	•		
Consumption	0.01mA in standby 20mA during connection + sensor consumption 30mA during acquisition + sensor consumption		
Com. Speed (BPS)	9600		
Operating temperature	-20 ÷ +70 °C		
Acquisition rate	Programmable from 10 sec to 24 hrs.		
Scan rate	Programmable from 10 sec to 24 hrs.		
Protezzion	IP65		
Dimensions	75x55x190 mm		
Weight	0.600 Kg		

### Accessories

<b>Battery 9V</b>	<b>ML000-AX-PS09</b>
<b>Power supply 220V</b>	<b>ML000-AX-PS01</b>
<b>Supply cable lighter</b>	<b>ML000-AX-CPS1</b>
<b>External power supply cable</b>	<b>ML000-AX-CPSE</b>
<b>Bracket kit</b>	<b>ML000-AX-MW01</b>
<b>Communication Kit (USB cable, driver and software VEDO)</b>	<b>ML-LY-COM</b>
<b>Alarm card includes TEST/RESET buttons and bistable relay</b>	<b>ML-LY-SA</b>
<b>GSM/GPRS modem</b>	<b>MDS-BSE</b>
<b>DC/DC for sensor supply +15Vcc</b>	<b>ML-LY-DC1515</b>

• standard    - not available    \* upon request  
\*\* with SIM STRUMENTI converter