



maxwell
industries



Production Data Acquisition
and industry monitoring



Smart energy
management and monitoring



Weather conditions
and environmental monitoring



Water quality
and pollution monitoring



Available

App



Real time

Chart



High

Accuracy

0,05 % f.s.

- Available Measures: mV, mA, mV/V, PT100, NTC
- Available Webserver
- Ethernet, RS485, RS232 and USB connections
- 0,05% F.S. Accuracy
- 2GB internal memory and real time data
- 4 differential analog channels
- Available GPRS version

**NEW
2014**

SMS - e-mail ALERT)))





miniOMNIAlog Universal Rugged Remote DAQ

Technology skills of Maxwell Industries plus 25 years of expertise in geotechnical instruments of Sisgeo srl have produced miniOMNIA – a versatile, high accurate "smart" data acquisition system - with 4 analog inputs.

With miniOMNIA no other configuration/analysis software package is needed as it is provided with web server on board; just a browser and it is ready to use. Logged data is ready to be showed in graphic "real time" mode or exported in CSV file.

DIMENSIONS	L 151,00 mm W 125,00 mm H 90,00 mm (without cable gland and antenna)
WEIGHT	780 grams (batteries included)
MATERIAL	Polycarbonate

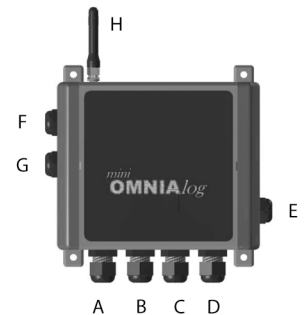
CONNECTION

External connections:

- A Analog input
- B Analog input
- C Analog input
- D Analog input
- E Digital output
- F External power supply
- G RS-485 instruments
- H Antenna

Internal connections:

- USB Host
- USB Otg
- Display
- n° 2 keys



I/O	
ANALOG INPUTS	4 differential, individually configured
DIGITAL INPUTS	0
DIGITAL OUTPUT	One digital output (for alarm, etc.): volt-free closure (low voltage 30V, 2A)

ANALOG MEASUREMENT SPECIFICATION	
TYPE OF MEASUREMENT	mA, mV, V, mV/V, °C
ADC	24-bit (22 true bit) differential Analog-to-Digital Converters, 5SPS, 0-24 Average Function, auto-calibration and auto-range
RANGE	Current loop (2 wires); range 0..20mA (power supply up to 100mA) Transmitter (3-4 wires); range 0..20mA (power supply up to 100mA) Voltage (4 wires); range ±10mV, ±100mV, ±1V, ±10V Servo inclinometer; range ±5V Wheatstone bridge (6 wires, with sensing); range ±10m V/V Platinum RTD (Pt 100); range -50°C to +150° C Thermistor (NTC 3KΩ); range -50°C to +150° C Potenziometer; range ±2.5 V
READING RESOLUTION	1μA With F.S. 20mA, 1μV with F.S. ±10mV, 10μV with F.S. ±100mV, 100μV with F.S. ±1V, 0.1V with F.S. ±10V, 0.1°C with F.S. 1000 (Pt 100), 0.1°C with F.S. 10000Ω (NTC), 0.001 m V/V with F.S. ±10m V/V
MEASUREMENT ACCURACY	0.05% F.S. (0.1% F.S. for PT 100 and NTC)
TEMPERATURE DRIFT	< 10 ppm/°C, range -30°C to +70°C

CPU AND INTERFACE	
MASS STORAGE	SD CARD 2 GB for data and WEB pages

INTERFACE

SERIAL PORT	Only for GSM/GPRS internal module connection
GSM/GPRS module (optional)	Quad-band EGSM 850/900/1800/1900 MHZ, GPRS Class 10, integrated SIM holder Extended temperature range (-40°C to 85°C). Stubby antenna with SMA connector
RS485 OPTO ISOLATED	N° 1 communication interfaces RS485
USB	USB 2.0 pen-drive only (FAT16 or FAT 32)

SYSTEM POWER REQUIREMENTS

PROTECTION	Electro-mechanical relays, Gas Discharge Tubes, Overvoltage and reverse polarity protection
INTERNAL NON-RECHARGEABLE BATTERIES	6 batteries size AA, chemistry Lithium/Iron disulfide (Life s2), nominal voltage 1.5 V, min 2 a continuous current discharge, min 2 a pulse capability, min 3 Ah capacity
EXTERNAL RECHARGEABLE BATTERIES	12 Vdc nominal
TYPICAL CURRENT DRAIN	miniOMNIAlog sleep mode: 60μ A On: 60m A, With display on: 40mA, Analog initialization: 60m A, Measurement: 70m A (with 12 mA@24V sensor consumption)

ENVIRONMENTAL CONDITION

OPERATING TEMPERATURE	-30 to +60°C (batteries -20 to +60°C)
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CERTIFICATIONS

	Meets the essential requirements of the R&TTE Directive 1999%/CE
	EN 61010, EN 601511, EN 301489

CALIBRATION

RECALIBRATION	Recommended every two years
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