Technical Datasheet

MOBILE DATALOGGER
POLWAX MR800 / MR1600 / MR3200

MOBILE DATALOGGER

Because power expenses account for roughly 70–80 percent of a compressed air system's overall cost, when we talk about operational costs in compressed air systems, we are actually talking about energy costs. Does your compressed air system fall under this as well? What are your actual costs per m3 of air produced? What kind of energy does waste heat recovery produce? What is your plant's overall performance balance? How high are the pressure dew points, the differential pressures of single filters, and the amount of compressed air used?

Features

- **TFT Touch Screen Display**
- **User Friendly Menu**
- **Easy to Carry**
- **Light Weight**
- **Cloud Dashboard for Data Monitoring**
- **USB Connection**
- **Ethernet & MODBUS RTU Communication**
- **Relay & RS 485 Output**
- **Wifi & GSM Communication**
- **Printer Port**

Suitable for any third party Sensors / Transmitters

Sensors for Mobile Datalogger POLWAX MR800 / MR1600 / MR3200

Compressed air and gas flow meters

Installation and removal through a normal 1/2" ball valve when under pressure. A safety ring prevents uncontrollable ejection in the event of installation or removal while under pressure. nitrogen, argon, CO2, compressed air, and oxygen.

Dew Point Sensors

- extremely durable; very stable Large measurement range (-80° to +20 °Ctd), short adaptation time For every dryer: (Adsorption dryers, membrane dryers, and refrigeration dryers)
- Fast coupling standard measuring chamber for simple installation under pressure

Pressure Sensors

- a wide choice of pressure sensors with various measuring ranges for each measurement purpose
- Easy connection installation under pressure
- Temperature sensors a lot of temperature options sensors, for example, in measurement or of the outside temperature temperature of a gas
- Pt100 (2-wire or 3-wire)
- Pt1000 (2-wire or 3-wire)
- Sensors for temperature that (4-20 mA) measurement transducer output)

Tempreture Sensors
Humidity Sensors
Flow Sensors

Technical Details

Channels	8 / 12 / 16 / 24/ 32 / 48
Inputs	Universal / RTD pt100 / Thermocuople / 4-20mA / 0-10V / Customize
Display	4.3" / 5.6" / 7" / 8" Color Touch Screen
Ethernet Communications	Webserver / FTP / email / Modbus TCP
Password Protection	Access to conguration is allowed only after the user has entered a password
Language	English
Display Color	TFT
Filename	Name tag, prexed with date/time
Thermocouple Types	B, E, J, K, L, N, R, S, T
Resistance Thermometer	Pt100
Digital Filter	Programmable 0 to 60s
Type	Portable
Display Type	Color
Communications	USB / Ethernet / RS485 Modbus / Wi-Fi / GSM
Power Supply	230 VAC
Operating Temperature	–10 to 50 °C
Storage Temperature	-40 to +70 °C
Data Monitoring Software	POLWAX_View10.4 (Suitable for Win10 / Win10Pro)
Report Format	.PDF / .csv / .xlsx
Cloud Dashboard	Webbase*

* Suitable for any third party Sensors / Transmitters

POLWAX®

Mobile Data logger
Unlimited Applications

POLWAX is a Italian manufacturer and supplier of industrial automation equipment. The company has been in the market for nearly 8 years and offers services provided by a team of young and qualified professionals, both designers and programmers, as well as sales representatives.
We specialise in the production of devices data recorders. In the offer you will find two families of high quality products for data recording:
CLIMA series for climate monitoring
Motas series for industrial applications
What's new is the portable case for these products, which allows transporting them from place to place. This is a significant advantage, because stationary recorders gain features of portable recorders and at the same time retain the capabilities for advanced
measurement and recording of the tested media.

Applications :
- Recording the operating parameters in water and sewage pumping stations
- Recording the operating parameters in heat chambers and heat exchange units
- Pressure control of hydrophore stations
- Recording changes in river levels

Mobile Datalogger
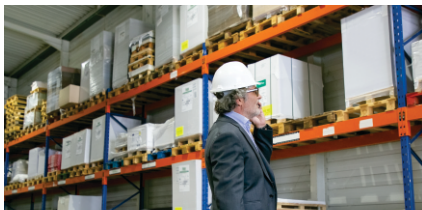
|		
Warehouse	Mining	Hydrophore station
Cement Industry	Pump station	Defense
Pharma Industry	Heat exchange unit	Chemical Industrty

Protection of electronic equipment and valuable recorded data is a growing concern. This is particularly important in non-stationary solutions, when measuring instruments are mounted in portable, sealed transport cases, which are the only barrier against the harsh environmental conditions. Therefore, this case must meet a number of requirements guaranteeing the safety of the devices installed in it, and hence the reliability of this type of data recorders. In the sets offered by our company we use which is a proven and reliable solution in the transport and storage of sensitive measuring instruments for professionals.

The double-step latches are smart and make the case easier to open.
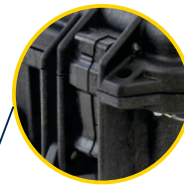
Heavy duty „fins" are engineered to protect latch and hinge areas.
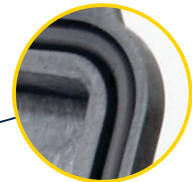
The neoprene **o-ring** keeps the case watertight.

Extra thick **5.3 mm wall construction** provides significantly greater strength to weight ratio over conventional injection moulding.

Technological holes allow for lock or seal set up to increase safety in the event of data theft attempts.

Big-fold down and rubberized **handles** are strong, comfortable and ergonomic

Automatic pressure equalization valve releases air from the interior while keeping water molecules out, ensuring IP 65 protection class.

The On/Off switch on the POLWAX MR800 / MR1600 / MR3200 panel enables you:

• To view the remaining battery capacity and the charging status, short press the button.
• To power on or off the device, long press the button for 2 seconds. After the POLWAX MR800 / MR1600 / MR32000 is powered on, it starts the initialization process. During this period, POLWAX MR800 / MR1600 / MR3200detects the connected sensors and establishesthe connections to sensors.

The quick buttons or icon on the bottom are described as follows:
• Graphic:To switch to the graphic view.
• Value: To switch to the value view.
• Menu: To enter the operation menus for detailed settings.
• Up and Down arrows: To scroll up and down pages to view measured data.

The Menu button enables you to view and configure settings of the POLWAX MR800 / MR1600 / MR3200 and the connected sensors
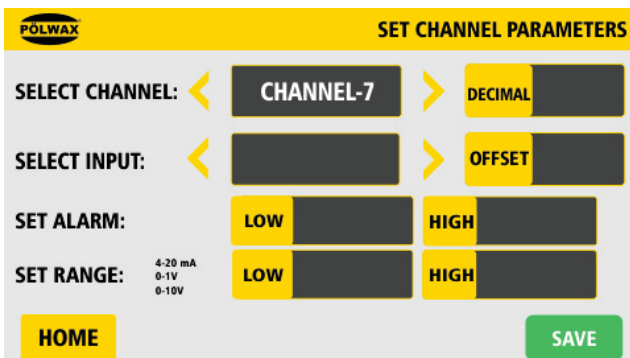

Channel No. :
Use (<) & (>) buttons to change the channel numbers.
Use save button to save the settings for each channel.

Range High/LOW set point value :
Each channel can be programmed for different High/Low set point values individually. Press "High". The display will show New Screen; Enter the Value, and Press "Low". The display will show New Screen; Enter the Value, Particular Sensor Type Set Point Value Already Added.
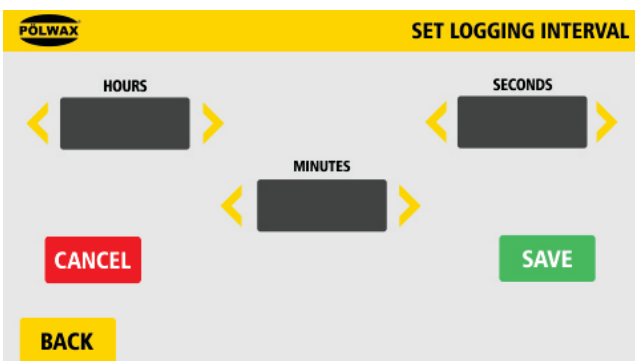

Set LOG Time :
The menu is used to set the duration of two successive readouts to be stored in memory/printouts. Press the log Time .The display will show New Screen" Log TIME SETTING ""Set the Time. Use + & - buttons to set the desired digitvalue(Hour/Min/Sec).Then Press OK Time Will SET. Press Cancel for Previous Screen. Range is
1sec -59 sec, 1Min-59 Min, 1hrs - 23hrs.
NOTE: - Printer port is provided at the back side of the logger. Only parallel port dot matrix
printer can be connected. Printing of stored data is possible through software.

Cloud

The base units equipped with Ethernet, Wi-Fi and GSM/4G connectivity can automatically send, at regular intervals, the data to an HTTP server, and in particular to the Polwax portal "**www.polwax.cloud**". This allows you to view the data from anywhere in the world, even by using mobile devices (tablet, smart phone, notebook), simply having an Internet connection and using a web browser. The data sending interval is configurable.
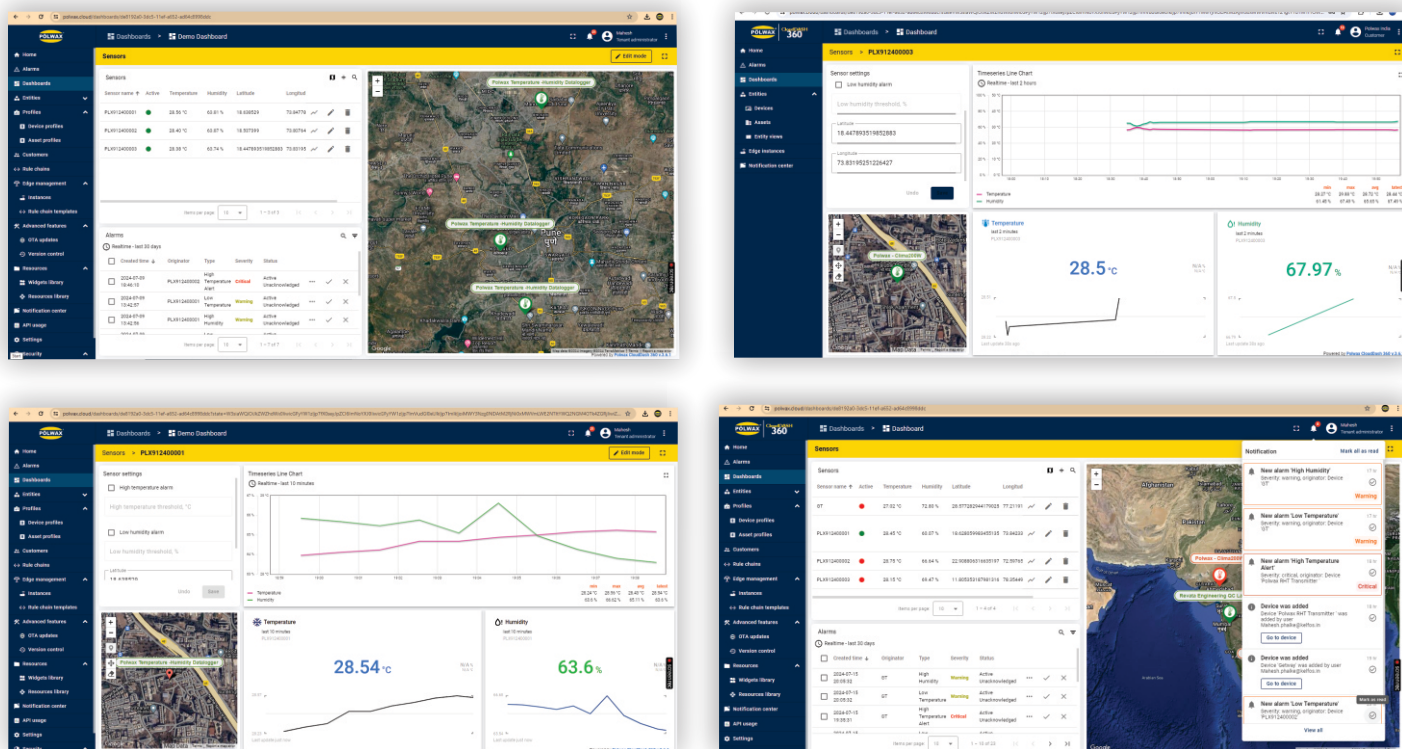
Configuration

The data logger equipped with LCD and keyboard can be also configured via the front keyboard. The access to the configuration parameters of the data logger via keyboard is password protected. There is one password for the use of the data logger as operator (access to some settings only) & (access to all the configuration parameters). The changes done to a data logger configuration via keyboard are automatically transmitted to the base unit and also reported in the cloud dashboard, allowing an always updated viewing of the system from the PC connected to the base unit. The base unit keeps also track of the system parameters of each data logger (for example of the alarm thresholds, etc.); it is therefore not necessary to request the parameters to the various data loggers to know the system configuration, just connect the PC to the base unit to immediately get all the information needed.

Internal clock

The internal clock of each data logger is continuously synchronized with the clock of the base unit, thereby eliminating any problems due to the drift of the data logger clock. This ensures that the data loggers of the system have all the same time, feature particularly useful if you want to compare the measures acquired by various data loggers at the same time.If the base unit can connect to the Internet (via Wi-Fi, Ethernet, cellular network), the clock can be regularly synchronized automatically with a reference server.

Router → **Data Logger** → **Cloud Server** → **Cloud Dashboard**

Polwax Cloud
Your Data, Anytime, Anywhere

Polwax Cloud harnesses the power of lot to automate data logging and alert notifications, enabling you to monitor and manage multiple data logging devices in different locations completely remotely. The system easily scales to meet your needs. Perfect for compact systems with just a few measuring points, or corporate solutions with thousands of devices around the globe.

You will need to create an account at www.polwax.cloud before setting up your cloud-connected data logger.

The **Polwax MOTUS Series** has been designed to monitor air temperature and relative humidity & other industrial parameters in a large range of applications. Its external temperature and humidity probe made it an ideal choice for applications where it may be problematic to locate the whole device such as museum display cases and HVAC systems.

Products in the **Polwax MOTUS Series** range are simple to set-up and easy to use. Download the Polwax Cloud App and set-up a device in minutes over your WiFi network. After set-up, the device can be placed anywhere within range of the WiFi network, continually monitoring and recording your data to the EasyLog Cloud. the ambient temperature and humidity of your chosen location from anywhere at any time.

Features at a glance*

| Store your data logging records securely on the Cloud | Connect multiple users with variable account privileges | Connect data loggers from multiple sites in a single account | Easily access your most important data, anywhere | Remotely manage all of your data logging devices | Never miss a critical event with flexible advanced notifications | Review and analyse your data with powerful graphing functionality | Keep track of data events and system activity with a detailed event log |

*Features depend on account type.

PÖLWAX ®

POLWAX Group has got an experienced, highly-qualified project team conducting extensive R&D operations. Owing to that, goods holding the POLWAX brand feature customer-tailored flexibility and meet requirements of various industries.

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