NEW

Dual Channel Micro-Voltage Input Data Logger

OMYL-M32

1 YEAR WARRANTY C€

✔ **Two Voltage Input Channels**
✔ **Up to 4 Million Readings (Internal Memory Size)**
✔ **Up to 32 Hz Sampling Rate**
✔ **High Accuracy**
✔ **20 Bit A/D Converter**
✔ **Transfer Rate of 500 kbps**
✔ **Low Current Consumption**
✔ **Shock Proof, IP65 Housing (Dust and Water Jet Proof)**
✔ **Up to 4 Years Battery Life**

OMYL-32 shown larger than actual size.

The OMYL-M32 voltage data logger has two channels for recording extra-low voltage levels in the millivolt region and also common reference voltage measurements, e.g. standard analog outputs (0 to 1 V, 0 to 5 V, 0 to 10 V). This data logger is available with standard memory of 100,000 readings (OMYL-M32) or expanded memory of 4 million readings (OMYL-M32-4M). Both models can be used for recording small measurement signals from a Wheatstone bridge, force or range sensor, strain gauge, or other extra-low voltages applications. This data logger provides constant bridge excitation current for strain gauge sensors. These devices are programmable so that you can log data from either one or two channels.

Both models feature a 20 bit analog to digital converter giving a resolution of up to 0.15 µV. The data logger's measuring range is user-selectable, enabling you to work with measuring ranges from 10 mV to 20 mV at the same resolution.

The storage medium is non-volatile flash memory so no data is lost if the battery becomes discharged. Data logger setup as well as data retrieval is accomplished using the included standard OMYL-SOFT software. Downloaded data is stored in the OMYL-SOFT software as a text file for viewing in third party software packages or Microsoft Excel. The OMYL-SOFT standard software does not include any graphing functionality. Graphing and analyzing downloaded data files requires the OMYL-SOFT-PLUS version of the software (sold separately).

Strain Gauges Measurements as Bridge Circuits (for Full Bridges 60 to 700 Ω)					
Range mV	±5	±10	±20	±50	±100
Resolution µV*	0.15	0.3	0.6	0.8	1.5
Input Impedance MΩ	2.5	2.5	2.5	2.5	2.5

* Strain gage measurements allow a sample rate of up to 32 Hz in fast mode. The maximum resolution is ten times the above value.
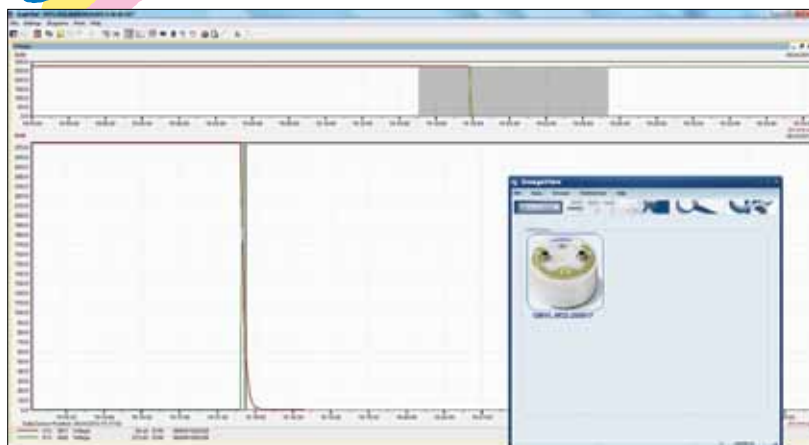
High Impedance Mode						
Range mV	±5	±10	±20	±50	±100	±1000
Resolution µV*	0.15	0.3	0.6	0.8	1.5	15
Input Impedance G Ω	1	1	1	1	1	1

* High impedance mode allows for a maximum sample rate of 1 Hz.

Input Ranges								
Range mV	0 to 10	0 to 20	0 to 50	0 to 100	0 to 1 V	0 to 2.5V	0 to 5 V	0 to 10 V
Resolution µV*	0.58	0.58	0.76	1.54	15.4	38.9	76.9	154
Input Impedance MΩ	2.5	2.5	2.5	2.5	2.5	0.1	0.1	0.1

* Input ranges can be measured at 32 Hz. At 32 Hz the maximum resolution is ten times of the above value.

OMYL-SOFT-PLUS graphical display.

OMYL-M32 shown actual size with rear cover removed to show USB connection.

SPECIFICATIONS

Input Cables: OMYL-CU for voltages greater than 1V; OMYL-CS for voltages from 0 to 1V

Accuracy: 0.1% of range

Reading Rate: 1 second to 24 hours; 2 Hz, 4 Hz, 8 Hz, 16 Hz, 32 Hz in fast mode; 1 Hz only in high impedance mode

Start Modes: Immediate start, delayed start

Memory Capacity
   OMYL-M32: 100,000 readings
   OMYL-M32-4M: 4 million readings

Memory Wrap Around: Yes (software configurable)

Battery: 3V lithium battery [standard temperature range battery (included), optional high temperature range battery]; user replaceable

Battery Life (Standard Temperature Range Battery): 4 years at 1 minute reading rate, 230 days at 10 second reading rate, 25 days at 1 second reading rate

LED Functionality: Integrated status LED indicates data logging status, low battery or alarm condition

Alarms: Software programmable high/low thresholds

Computer Interface: USB (interface cable included)

Software: XP SP3/Vista/7 and 8 (32- and 64-bit)

Operating Environment: -30 to 70°C (-22 to 158°F) with standard lithium battery; -40 to 90°C (-40 to 194°F) with optional high temperature lithium battery

Dimensions: 30 H x 50 mm dia (1.18 x 1.97")

Weight: 70 g (2.5 oz)

Enclosure: Robust, shock-proof POM, IP65

OMEGACARE^{SM} extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE^{SM} covers parts, labor and equivalent loaners.

To Order

Model No.	Description
OMYL-M32	Dual channel micro-voltage input data logger, 100,000 readings
OMYL-M32-4M	Dual channel micro-voltage input data logger, 4 million readings

Comes complete with OMYL-CU and OMYL-CS voltage input connection cables, OMYL-SOFT software, 3V lithium battery (standard temperature range), 1.8 m (6') USB interface cable and software and operator's manual on USB stick.

Ordering Example: OMYL-M32 *dual channel micro-volt data logger, 100,000 readings and* **OCW-1,** *OMEGACARE^{SM} extends standard 1-year warranty to a total of 2 years.*

Accessories

Model No.	Description
OMYL-SOFT-PLUS	Plus version of the software for graphing and analyzing data files
OMYL-CU	Spare connection cable for voltages greater than 1V
OMYL-CS	Spare connection cable for voltages from 0 to 1V
OMYL-WH20	Wall mount holder for data logger (includes tamper evident lead seal)
OMYL-WS50	Set of 50 tamper evident lead seals (50 wires and 50 seals)
OMYL-BATT	Replacement 3V lithium battery (standard temperature range)
OMYL-BATT-HT	Replacement 3V lithium battery (high temperature range)