

Temperature, Humidity and Barometric Pressure Data Loggers

OMYL-RH23 and OMYL-RH23E



- ✓ Integral Temperature/Humidity/Pressure Sensors
- ✓ OMYL-RH23 Has Internal Temperature/Humidity/Pressure Sensors
- ✓ OMYL-RH23E Has Internal Pressure Sensor with Temperature/Humidity Sensors Fitted in Integral Probe
- ✓ Up to 4 Million Readings (Internal Memory Size)
- ✓ Up to 4 Hz Sampling Rate
- ✓ High Accuracy
- ✓ 20 Bit A/D Converter
- ✓ Shock Proof, IP65 Housing (Dust and Water Jet Proof)
- ✓ Transfer Rate of 500 kbps
- ✓ Low Current Consumption
- ✓ Up to 4 Years Battery Life



OMYL-RH23 shown larger than actual size.

The OMYL-RH23 and OMYL-RH23E are robust devices capable of logging temperature, humidity and barometric pressure readings and are software configurable to record either all three of these parameters or just individual variables. These data loggers are available with standard memory of 100,000 readings (OMYL-RH23, OMYL-RH23E) or expanded memory of 4 million readings (OMYL-RH23-4M, OMYL-RH23E-4M). The OMYL-RH23/OMYL-RH23-4M have built-in sensors for temperature, humidity and barometric pressure. The OMYL-RH23E/OMYL-RH23E-4M have an internal pressure sensor with the temperature/humidity sensors fitted in an integral 100 mm (3.94") steel probe. These data loggers are suited for a variety of applications including environmental or climate studies, meteorological research and also in clean rooms and laboratories.

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).

SPECIFICATIONS

Sensor Type

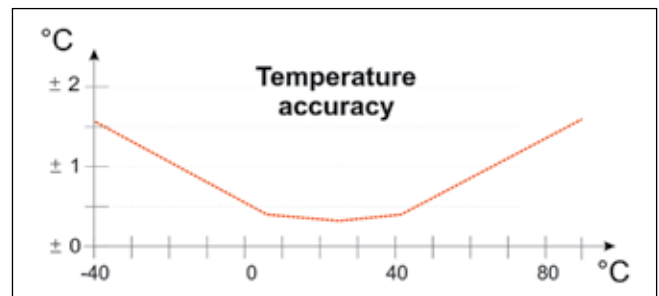
OMYL-RH23/OMYL-RH23-4M: Internal temperature, humidity and pressure sensors

OMYL-RH23E/OMYL-RH23E-4M: Internal pressure sensor with temperature and humidity sensors fitted in integral probe

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

Resolution: 0.01°C (0.02°F)

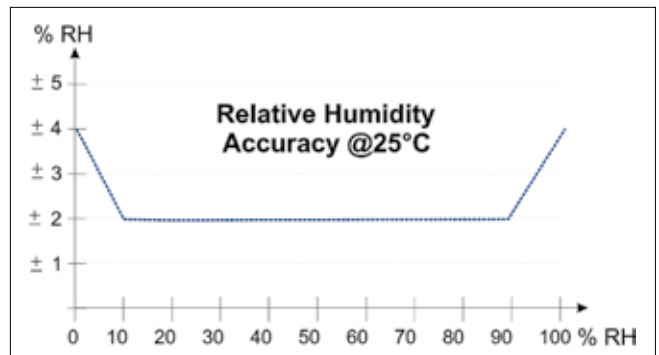
Accuracy: See chart below



Humidity Range: 0 to 100% RH

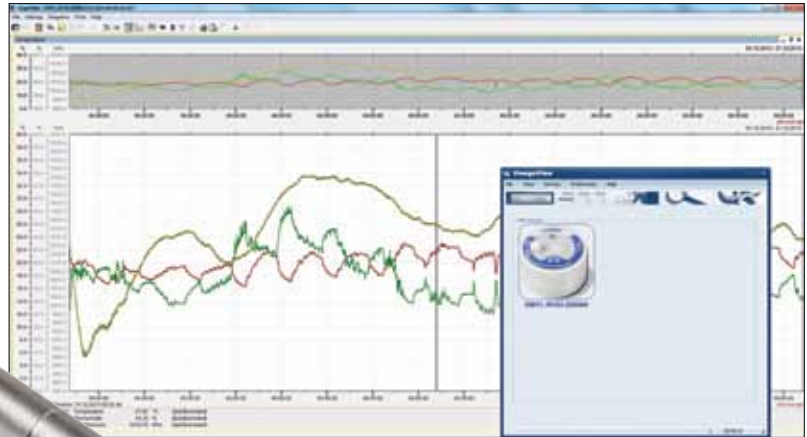
Resolution: 0.01% RH

Accuracy: See chart below





OMYL-RH23E shown smaller than actual size.



OMYL-SOFT-PLUS graphical display.

Barometric Pressure

Range: 10 to 1100 hPa

Resolution: 0.1 hPa

Absolute Accuracy @25°C: ±1.5 hPa

Relative Accuracy @25°C: ±0.5 hPa

Reading Rate: 1 second to 24 hours; 2 Hz, 4 Hz in fast mode

Start Modes: Immediate start, delayed start

Memory Capacity

OMYL-RH23, OMYL-RH23E: 100,000 readings

OMYL-RH23-4M, OMYL-RH23E-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

OMYL-RH23, OMYL-RH23-4M: 30 H x 50 dia mm (1.18 x 1.97")

OMYL-RH23E, OMYL-RH23E-4M: 30 H x 50 dia mm (1.18 x 1.97") with 100 L x 8 dia mm probe (3.94 x 0.31")

Weight: 70 g (2.5 oz)

Enclosure: Robust, shock-proof POM, IP65

To Order

Model No.	Description
OMYL-RH23	Temperature, humidity and barometric pressure data logger with internal sensors, 100,000 readings
OMYL-RH23-4M	Temperature, humidity and barometric pressure data logger with internal sensors, 4 million readings
OMYL-RH23E	Temperature, humidity and barometric pressure data logger with internal pressure sensor and integral temperature/humidity probe, 100,000 readings
OMYL-RH23E-4M	Temperature, humidity and barometric pressure data logger with internal pressure sensor and integral temperature/humidity probe, 4 million readings

Accessories

Model No.	Description
OMYL-SOFT-PLUS	Plus version of the software for graphing and analyzing data files
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-RS-OM	Radiation screen including offset mount for OMYL-RH23E and OMYL-RH23E-4M data loggers with integral probe (protects external probe from effects of direct sunlight and rainfall when used outdoors)
OMYL-BATT	Replacement 3V lithium battery (standard temperature range)
OMYL-BATT-HT	Replacement 3V lithium battery (high temperature range)

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

Ordering Example: OMYL-RH23 temperature, humidity and barometric pressure data logger with internal sensors, 100,000 readings and OCW-1, OMEGACARESM extends standard 1-year warranty to a total of 2 years.