

## Portable Data Loggers with USB Interface

### OM-EL-USB Series



- ✓ Temperature, Temperature/RH/ Dew Point, Voltage, and Current Models
- ✓ Data Logger Plugs Directly into Computer's USB Port for Easy Setup and Data Download (No USB Cable Required)
- ✓ User-Programmable Alarm Thresholds with LED Indicators
- ✓ Bright Red, Green, and Orange LED Indication
- ✓ Low-Battery Warning
- ✓ IP67 Protection

The OM-EL-USB Series of data loggers includes models for temperature, temperature/relative humidity, voltage, and current measurement. The user can easily set up the data logger and download the stored data by plugging the module into a PC's USB port and running the easy-to-use Windows software. Software-selectable setup parameters include logging rate, start time, high/low alarm settings, and temperature units (°C or °F). Data can then be graphed, printed, and exported to other applications such as Excel. Each data logger is supplied complete with a long-life lithium battery. Built-in LED indicators show data logger status. OM-EL-USB Series data loggers are protected against moisture to IP67 standards when the protective cap is fitted.

### Specifications

#### OM-EL-USB-1 TEMPERATURE DATA LOGGER

**Range:** -35 to 80°C (-31 to 176°F)

**Resolution:** 0.5°C (1°F)

**Accuracy:** ±1.0°C (±2.0°F)

**Memory:** 16,000 temperature readings

**Logging Interval:** 10 sec to 12 h

**Operating Temperature**

**Range:** -35 to 80°C (-31 to 176°F)

**Alarm Thresholds:**

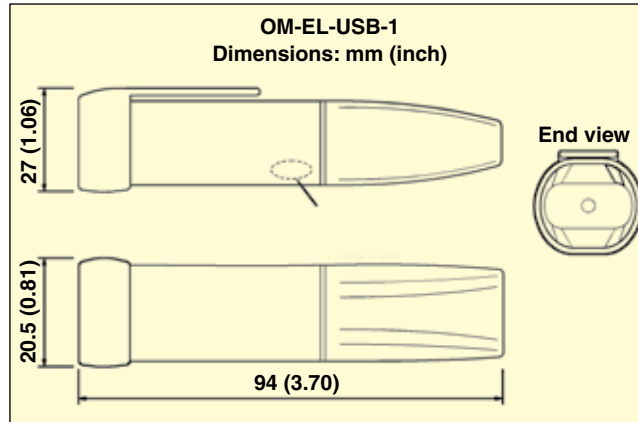
High/low alarm thresholds selectable in software

**Start Date/Time:**

Selectable in software

**Status Indicators (LEDs):**

Red, green and orange



OM-EL-USB-1, shown smaller than actual size



**Software:** Windows 2000/XP/Vista/7 (32- and 64-bit)

**Power:** ½ "AA" 3.6 V lithium battery (included)

**Battery Life:** 1 year (at 25°C and 1 minute logging interval)

**Weight:** 43 g (1.5 oz)

**Dimensions:** See dimensional drawing



Windows software—initial setup window

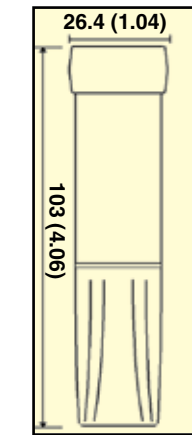


Windows software—alarm setup window



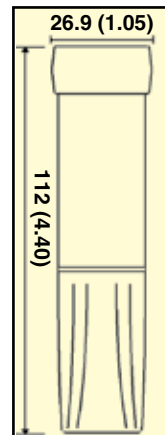
Windows software—logger start window

OM-EL-USB-2



OM-EL-USB-2  
Dimensions: mm (in)

OM-EL-USB-3



OM-EL-USB-3, -4  
Dimensions: mm (in)

OM-EL-USB-4



**OM-EL-USB-2 AND OM-EL-USB-2-PLUS (TEMPERATURE AND RELATIVE HUMIDITY) (DEW POINT INDICATION VIA WINDOWS SOFTWARE)**

**TEMPERATURE**

Range: -35 to 80°C (-31 to 176°F)  
Resolution: 0.5°C (1°F)

**Accuracy:**

OM-EL-USB-2: ±0.5°C (±1.0°F);

OM-EL-USB-2-PLUS: ±0.3°C (±0.6°F)

**HUMIDITY**

Range: 0 to 100% RH

Resolution: 0.5% RH

Accuracy (20 to 80% RH):

OM-EL-USB-2: ±3% RH;

OM-EL-USB-2-PLUS: ±2.0% RH

**DEW POINT**

Accuracy (overall error in the calculated dew point for RH measurements from 40 to 100% RH @ 25°C): ±2°C (±4°F)

Memory: 16,000 temperature and 16,000 relative humidity readings

**Logging Interval:**

10 seconds to 12 hours

**Operating Temperature Range:** -35 to 80°C (-31 to 176°F)

**Alarm Thresholds:** High/low alarm thresholds for % RH and temperature, selectable in software

**Start Date/Time:**

Selectable in software

**Status Indicators (LEDs):**

Red and green

**Software:** Windows 2000/XP/VISTA/7 (32-bit and 64-bit)

**Power:** ½ "AA" 3.6 V lithium battery (included)

**Battery Life:** 1 year typical (depends on sample rate, ambient temperature and use of alarm LEDs)

**Weight:** 57 g (2 oz)

**Dimensions:** See dimensional drawing

**OM-EL-USB-3 VOLTAGE**

Range: 0 to 30 Vdc

Resolution: 100 mV

Accuracy: ±1%

Memory: 32,000 voltage readings

**Logging Interval:**

1 second to 12 hours

**Input Connection:**

Screw terminals

**Operating Temperature Range:**

-25 to 80°C (-13 to 176°F)

**Alarm Thresholds:** High/low alarm thresholds selectable in software

**Start Date/Time:**

Selectable in software

**Status Indicators (LEDs):**

Red and green

**Power:** ½ "AA" 3.6 V lithium battery (included)

**Battery Life:** 1 year typical (depends on sample rate, ambient temperature and use of alarm LEDs)

**Weight:** 57 g (2 oz)

**Dimensions:**

See dimensional drawing

**OM-EL-USB-4 CURRENT**

Range: 4 to 20 mA

Resolution: 0.1 mA

Accuracy: ±1%

Memory: 32,000 current readings

**Logging Interval:**

1 second to 12 hours

**Input Connection:** Screw terminals

**Operating Temperature Range:**

-35 to 80°C (-31 to 176°F)

**Alarm Thresholds:** High/low alarm thresholds selectable in software

**Start Date/Time:** Selectable in software

**Status Indicators (LEDs):**

Red and green

**Power:** ½ "AA" 3.6 V lithium battery (included)

**Battery Life:** 1 year typical (depends on sample rate, ambient temperature and use of alarm LEDs)

**Weight:** 57 g (2 oz)

**Dimensions:**

See dimensional drawing

**To Order** Visit [omega.com/om-el-usb-1](http://omega.com/om-el-usb-1) for Pricing and Details

Model No.	Description
OM-EL-USB-1	Temperature data logger with USB interface
OM-EL-USB-2	Temperature/RH/dew point data logger with USB interface
OM-EL-USB-2-PLUS	High accuracy temperature/RH/dew point data logger with USB interface
OM-EL-USB-3	Voltage data logger with USB interface
OM-EL-USB-4	Current data logger with USB interface
OM-EL-BATT	Replacement 3.6 V lithium battery
OM-EL-USB-CASE	Waterproof case NEMA 4X (IP67) for OM-EL-USB-1 and OM-EL-USB-2 data loggers

Each data logger is supplied with Windows software on CD-ROM, operator's manual and 3.6 V lithium battery. Data logger plugs directly into computer's USB port (no USB cable required). OM-EL-USB-2 temperature/RH/dew point data logger is limited to temperature measurement only when used inside the OM-EL-USB-CASE.

Ordering Example: OM-EL-USB-1, temperature data logger with USB interface.