

## WiFi Wireless Temperature and Humidity Data Loggers

### OM-EL-WIFI Series



OM-EL-WIFI-TH wireless temperature/humidity data logger.

OM-EL-WIFI-TC wireless thermocouple input temperature data logger shown with 5SC Series thermocouple and mounting bracket (included).



OM-EL-WIFI-T wireless temperature data logger with internal temperature sensor.



OM-EL-WIFI-TP wireless temperature data logger with removable thermistor probe (included).



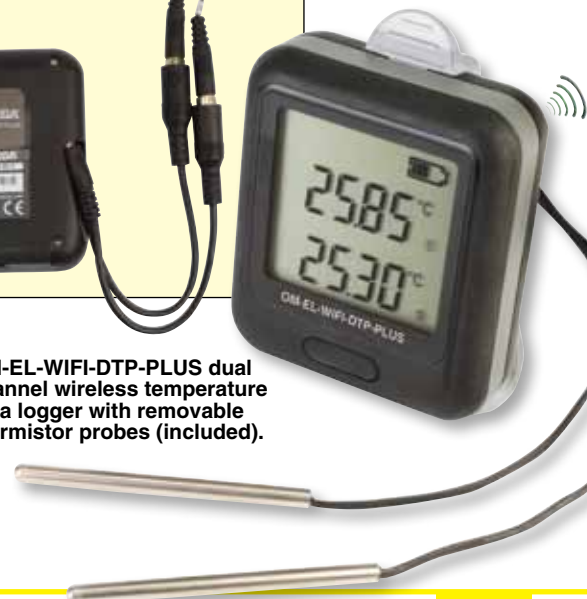
OM-EL-WIFI-DTC dual channel wireless thermocouple input temperature data logger shown with 2 5SC Series thermocouples and mounting bracket (included).

All models shown smaller than actual size.

- ✓ Four High Accuracy (-PLUS) Models Available
- ✓ WiFi Capability and Integrated Display
- ✓ Wireless Connectivity to PC Via WiFi
- ✓ WiFi Connection Indicator
- ✓ Easy Set-Up Using Free PC Software Download Available From OMEGA
- ✓ View and Analyze Multiple Data Loggers Using the PC Application, Including Immediate Graphing of Historic Data (Included)
- ✓ 802.11b Compliant
- ✓ Large Memory—Stores All Data Even if WiFi is Temporarily Disconnected
- ✓ Rechargeable Internal Lithium Polymer Battery (Included)
- ✓ USB Port Used for Recharging
- ✓ Low Battery Indicator
- ✓ Configurable High and Low Alarms with Indicator
- ✓ Maximum and Minimum Readings



Rear view of OM-EL-WIFI-DTP-PLUS showing probe input and splitter/adaptor (included).



OM-EL-WIFI-DTP-PLUS dual channel wireless temperature data logger with removable thermistor probes (included).

The OM-EL-WIFI-TH wireless temperature/humidity data logger measures the temperature and humidity of the environment in which it is situated via internal sensors. The OM-EL-WIFI-TP (single channel) and OM-EL-WIFI-DTP-PLUS (dual channel) wireless temperature data loggers measure temperature via the included removable thermistor temperature probes. The OM-EL-WIFI-T wireless temperature data logger measures temperature via an internal temperature sensor. The OM-EL-WIFI-TC (single channel) and OM-EL-WIFI-DTC (dual channel) wireless thermocouple input temperature data loggers accept J, K, T or N thermocouples. Data is transmitted wirelessly via a WiFi network to a PC and viewed using a free software package.

During configuration the data logger will search for an existing wireless network while physically connected to the PC. It can then be placed anywhere within range of the network. If the data logger temporarily loses connectivity with the network, it will log readings until it is able to communicate again with the PC application (max 60 days at 10 second sample interval for OM-EL-WIFI-TH); (maximum 120 days at 10 second sample interval for OM-EL-WIFI-TP, OM-EL-WIFI-T and OM-EL-WIFI-TC); (max 30 days at 10 second sample interval for OM-EL-WIFI-DTC and OM-EL-WIFI-DTP-PLUS). The range of the data logger can be increased by using WiFi extenders.

The probe on the OM-EL-WIFI-TP and OM-EL-WIFI-DTP-PLUS can be used in a wide range of temperature situations e.g. manufacturing processes, cold storage and hot storage.



OM-EL-WIFI-TP, detail of probe installation/removal.

The OM-EL-WIFI Series are low powered battery devices. When configured using typical sampling periods (e.g. once every 5 minutes) the data logger will operate for over one year. The battery can then be recharged via a PC or USB 5V wall adaptor using the USB lead provided.

The battery is safely charged when the unit is operating between 0 to 40°C (32 to 104°F). It is protected against charging outside this temperature range. Data logger readings may be inaccurate during battery charging.



Windows® software used for data logger set up, data transfer and display. (Software available free at OMEGA)

With the OM-EL-WIFI Series the software installed on the PC will allow set-up, data logging and data review. Set-up features will include data logger name, °C/°F, sample rate, and high/low alarms. Once configured, historic data can be viewed via the graphing tool or exported into Excel®. This software is available online for free from OMEGA.

The OM-EL-WIFI-TP (single channel) and OM-EL-WIFI-DTP-PLUS (dual channel) wireless temperature data loggers are supplied with removable thermistor temperature probes. The probe can be attached to a wall or other flat surface using the included mounting bracket (probe clips into the bracket).

## Specifications

### OM-EL-WIFI-TH

**Temperature Measurement Range:** -20 to 60°C (-4 to 140°F)

**Temperature Resolution:**

**OM-EL-WIFI-TH:** 0.5°C (1.0°F) display;  
0.1°C (0.18°F) recorded

**OM-EL-WIFI-TH-PLUS:** 0.5°C (1.0°F) display;  
0.01°C (0.01°F) recorded

**Temperature Accuracy (Overall Error):**

**OM-EL-WIFI-TH:**

5 to 60°C: ±0.3°C (±0.5°F) typical

-20 to 60°C: ±0.8°C (±1.4°F) maximum

**OM-EL-WIFI-TH-PLUS**

5 to 60°C: ±0.2°C (±0.4°F) typical

-20 to 60°C: ±0.8°C (±1.4°F) maximum

**Humidity Measurement Range:** 0 to 100% RH

**Humidity Resolution:**

**OM-EL-WIFI-TH, OM-EL-WIFI-TH-PLUS:** 1% RH  
(display and recorded)

**Humidity Accuracy (Overall Error@ 25°C)**

**OM-EL-WIFI-TH:** ±2.5% RH typical (20 to 80% RH);  
±5.0% RH maximum (0 to 100% RH)

**OM-EL-WIFI-TH-PLUS:**

±2.5% RH typical (10 to 90% RH); ±4.0% RH  
maximum (0 to 100% RH)

**Memory:** 500,000 temperature and 500,000 humidity readings

### OM-EL-WIFI-TP, OM-EL-WIFI-DTP-PLUS

**Operating Temperature Range (Data Logger):**

-20 to 60°C (-4 to 140°F)

**Probe Temperature Measurement Range:**

-40 to 125°C (-40 to 257°F)

# DATA LOGGERS

## Temperature Resolution:

**OM-EL-WIFI-TP:** 0.1°C (0.1°F) display and recorded

**OM-EL-WIFI-TP-PLUS, OM-EL-WIFI-DTP-PLUS:**  
0.01°C (0.01°F) display and recorded

## Temperature Accuracy:

**OM-EL-WIFI-TP:** ±0.6°C typical, ±1.0°C maximum

**OM-EL-WIFI-TP-PLUS:** ±0.1°C typical,  
±0.3°C maximum

**OM-EL-WIFI-DTP-PLUS:** ±0.2°C typical, ±0.6°C maximum

## Probe Clip Operating Temperature Range:

-40 to 100°C (-40 to 212°F)

**Memory:** 1,000,000 temperature readings

## Temperature Probe (Thermistor):

**OM-EL-WIFI-TP, OM-EL-WIFI-TP-PLUS,  
OM-EL-WIFI-DTP-PLUS:** High temperature flexible  
cable with 304 SS end cap

## Probe Dimensions:

**OM-EL-WIFI-TP:** Cable length, 50 cm (19.7"); end cap,  
25 x 4.8 mm dia (1 x 0.188")

**OM-EL-WIFI-TP-PLUS, OM-EL-WIFI-DTP-PLUS:**  
Cable length, 300 cm (118.1"); end cap, 75 x 4.95 mm  
dia (2.95 x 0.19")

## OM-EL-WIFI-T

**Temperature Measurement Range:** -20 to 60°C (-4 to 140°F)

## Temperature Resolution:

**OM-EL-WIFI-T:** 0.1°C (0.1°F) display and recorded

**OM-EL-WIFI-T-PLUS:** 0.01°C (0.01°F) display  
and recorded

## Temperature Accuracy:

**OM-EL-WIFI-T (-10 and 50°C):** ±0.5°C typical

**OM-EL-WIFI-T-PLUS (-10 and 60°C):** ±0.1°C typical

**Memory:** 1,000,000 temperature readings

## OM-EL-WIFI-TC, OM-EL-WIFI-DTC

### Temperature Measurement Range:

**Type K:** -200 to 1350°C (-328 to 2462°F)

**Type J:** -200 to 1190°C (-328 to 2174°F)

**Type T:** -200 to 390°C (-328 to 734°F)

**Type N:** -270 to 1300°C (-454 to 2372°F)

## Resolution (-99.9 to 999.9°C or °F):

0.1°C (0.1°F) display and recorded

**Accuracy:** ±1.5°C (±2.7°F)

**Thermocouple Connection:** Female subminiature  
connector

**Memory:** 1,000,000 temperature readings

**Operating Temperature Range (Data Logger):**  
-20 to 60°C (-4 to 140°F)

## GENERAL

**Power:** Rechargeable internal lithium polymer battery  
(included)

**Battery Life:** 1 year typical (depends on transmission  
interval)

**USB Supply Voltage:** 4.5 Vdc minimum, 5.5 Vdc  
maximum

**Logging Rate:** 1 reading every 10 seconds to  
1 every 12 hours

**Software:** Windows® XP/Vista/7/10 (32-bit or 64-bit),  
download

**Enclosure Rating:** IP55

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

**Dimensions (with Mounting Bracket Attached):**  
97.3 H x 71.3 W x 26.36 mm D (3.8 x 2.8 x 1.04")



### Free Thermocouple Included!

OM-EL-WIFI-TC includes a free 1 m (40") Type K insulated beaded  
wire thermocouple with subminiature connector and wire spool caddy.  
OM-EL-WIFI-DTC includes two free thermocouples  
(1 per channel). **Order a Spare! Model No. SC-TT-K-30-36.**

To Order	
Model No.	Description
OM-EL-WIFI-TH	WiFi temperature and humidity data logger
OM-EL-WIFI-TH-PLUS	High accuracy WiFi temperature and humidity data logger
OM-EL-WIFI-TP	WiFi temperature data logger with removable thermistor probe
OM-EL-WIFI-TP-PLUS	High accuracy WiFi temperature data logger with removable thermistor probe
OM-EL-WIFI-DTP-PLUS	High accuracy dual channel WiFi temperature data logger with removable thermistor probes
OM-EL-WIFI-T	WiFi temperature data logger with internal temperature sensor
OM-EL-WIFI-T-PLUS	High accuracy WiFi temperature data logger with internal temperature sensor
OM-EL-WIFI-TC	WiFi thermocouple input temperature data logger
OM-EL-WIFI-DTC	WiFi dual channel thermocouple input temperature data logger
OM-EL-WIFI-ADAPTOR	USB power adaptor for recharging any OM-EL-WIFI Series data logger (120 Vac input, 5 Vdc/1A output via standard size USB type A connector)
OM-EL-PROBE-EXT-CAB-1.5M	Thermistor probe extension cable, 1.5 m (5') for OM-EL-WIFI-TP and OM-EL-WIFI-TP-PLUS
OM-EL-PROBE-EXT-CAB-5M	Thermistor probe extension cable, 5 m (16.5') for OM-EL-WIFI-TP and OM-EL-WIFI-TP-PLUS
OM-EL-PROBE-EXT-CAB-10M	Thermistor probe extension cable, 10 m (33') for OM-EL-WIFI-TP and OM-EL-WIFI-TP-PLUS
OM-EL-WIFI-ALERT	Audible and visual alarm for OM-EL-WIFI Series data loggers

OM-EL-WIFI-TC includes one type K beaded wire thermocouple. OM-EL-WIFI-DTC includes two type K beaded wire thermocouples.

Comes complete with wall mount bracket, lithium polymer battery, 0.6 m (2') USB cable and quick start guide. Download free software available online.