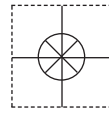


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OM-EL-WiFi-TH **Temperature/ Humidity** **Data Logger**



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It is the policy of OMEGA Engineering, Inc. to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

WARNING: These products are not designed for use in, and should not be used for, human applications.

OM-EL-WiFi-TH

WiFi Temperature & Humidity Data Logging Sensor

ORDERING INFORMATION

WiFi Temperature &
Humidity Data Logging
Sensor

OM-EL-WiFi-TH

FEATURES

- Temperature and humidity data logging sensor
- WiFi capability and integrated display
- Wireless connectivity to PC via WiFi
- Easy sensor set-up using free PC software
- View and analyze multiple sensors using the PC application, including immediate graphing of historic data
- Measurement range from -20 to +60 °C (-4 to +140 °F)
- 802.11b compliant
- Capable of logging greater than 500,000 data set entries
- Sensor memory stores all data even if WiFi is temporarily disconnected
- IP55
- Rechargeable internal lithium polymer battery
- Configurable high and low alarms with indicator
- Max & Min readings
- Low battery indicator
- WiFi connection indicator
- USB port used for recharging
- Supplied with wall bracket and micro USB lead



The OM-EL-WiFi-TH sensor measures the temperature and humidity of the environment in which it is situated. Data is transmitted wirelessly via a WiFi network to a PC and viewed using a free software package. During configuration the sensor 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 sensor 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). The range of the sensor can be increased by using WiFi extenders.

This OM-EL-WiFi-TH is a low powered battery device. When configured using typical sampling periods (e.g. once every 60 seconds) the sensor will operate for over one year. The battery can then be recharged via a PC or USB +5V wall adapter 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. Sensor readings may be inaccurate during battery charging.

The software installed on the PC will allow set-up, data logging and data review. Set-up features will include sensor 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 for free from www.omega.com.

www.omega.com

This sensor stands alone by itself on a horizontal surface and comes with a wall bracket that can be screwed onto a wall or flat surface. The sensor clips into the bracket.

All OM-EL-WiFi-TH sensors are thoroughly tested pre-release but the sensor may experience compatibility issues with certain WiFi networks. In this instance we recommend the use of network accessories available on the Omega website.

Specifications	Minimum	Typical	Maximum	Unit
Battery life		>1*		Year
USB supply voltage	4.5v		5.5v	V d.c.
Temperature measurement range	-20 (-4)		+60 (+140)	°C (°F)
Internal resolution		+/- 0.5		°C
Temperature accuracy (overall error between -10°C and +60°C)		+/- 1.0		°C
Humidity accuracy (overall error between 20%RH and 80%RH)		+/- 3.0		%RH
Logging rate (user configurable)	Every 10s	30 seconds	Every 12hrs	Transmission rate
Operating temperature range	-20 (-4)		+60 (+140)	°C (°F)

* Typical but will be less if frequent transmissions

Warning - do not exceed operating temperatures

EXAMPLE OF UNIT WHILE PHYSICALLY CONNECTED TO PC DURING SET-UP

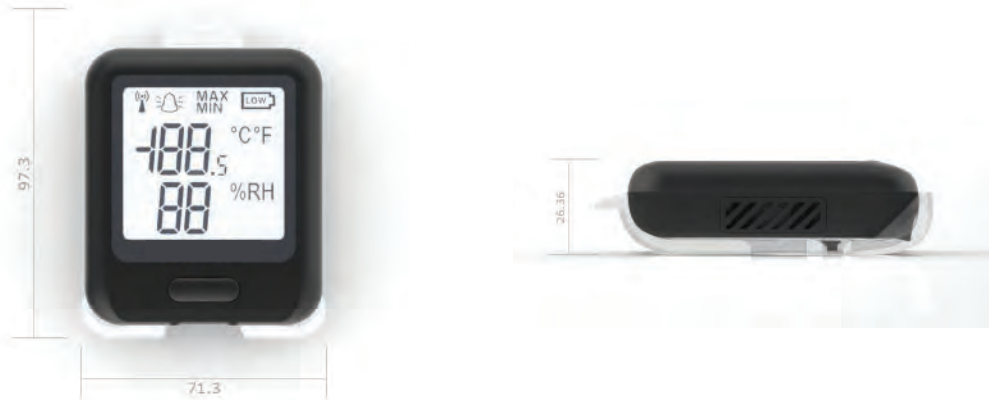


HARDWARE

- Battery: Rechargeable via USB connection.
- ARM MCU.
- 1x microUSB Type B (bottom of unit) for connection of unit to PC. 0.5m USB cable supplied.

PHYSICAL DIMENSIONS

All dimensions in millimetres (mm)



www.omega.com

LCD SCREEN SHOTS

1) NORMAL DISPLAY - CURRENT TEMPERATURE



2) MAXIMUM RECORDED VALUES SINCE LAST RESET



3) MINIMUM RECORDED VALUES SINCE LAST RESET



4) RECEIVED SIGNAL STRENGTH INDICATOR (RSSI) (VALUE BETWEEN 0 & 10)



5) DATA SYNCING



ADDITIONAL FUNCTIONALITY

When the user cycles through to the Received Signal Strength Indicator (RSSI) screen the unit automatically transmits a dummy message every 2 seconds to enable an RSSI reading to be displayed. If there is any outstanding data waiting to be transmitted, this data will be sent at the same time but if not it'll just send the dummy message and the next data package will be sent as per the unit configuration.

When on Max or Min screen, holding the button for 3 seconds will clear the stored values.

The sensor can be restarted by holding the button for 10 seconds until the screen blanks and LOW is shown flashing in the top right hand corner of the display. The sensor will retain all settings but will lose any data that has not been transferred to the PC. The sensor can be reset to factory state by holding the button for 20 seconds but this will delete all settings and stored data.

Note: neither the restart or the reset will delete data already transferred to your PC.

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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