User's Guide

Instruction Sheet

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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-USB-1-PRO-A

Temperature Data Logger with Extended Range

FEATURES

- -40 to +125°C (-40 to +257°F) measurement range
- Stainless Steel (316 grade) case
- Environmental protection to IP67
- · USB interface for set-up and data download
- · Immediate and delayed start logging
- Supplied with replaceable high capacity lithium battery and Windows control software.



Standard Data Logger OM-EL-USB-1-PRO-A (Data Logger, Software

on CD, Battery)

Replacement Battery OM-EL-USB-1-PRO-BATT



This standalone data logger measures and stores up to 32,510 temperature readings over a -40 to $+125^{\circ}$ C (-40 to $+257^{\circ}$ F) measurement range. The

stainless steel 316 assembly provides protection from corrosion, impact and water ingress to IP67/NEMA 4X. The unit is powered by a 2/3AA 3.6V lithium battery which allows logging for up to 3 years. Setup and downloading is completed by plugging the data logger into a PC's USB port and running the purpose designed software under Windows 7, Vista, 2000 or XP. Downloaded data can then be graphed, printed and exported to other applications.

Specifications	Minimum	Typical	Maximum	Unit
Measurement range	-40 (-40)		+125 (+257)	°C (°F)
Accuracy (overall error)		±0.2 (±0.4) †	±0.5 (±1)	°C (°F)
Internal resolution		0.1 (0.2)		°C (°F)
Logging rate	every 1 s		every 12 hr	-
Operating temperature range	-40 (-40)		+125 (+257)	°C (°F)
2/3AA 3.6V Lithium Battery Life	1*	2**	3	Year

- † Between 0°C and 40°C
- * 10 second logging rate @ -20°C
- ** 10 second logging rate @ +80°C

WINDOWS CONTROL SOFTWARE

Omega's EasyLog USB control software is supplied free of charge with each data logger. Easy to install and use, the control software runs under Windows 7, Vista, 2000 or XP. The software is used to set-up the data logger as well as download, graph and export data to Excel.

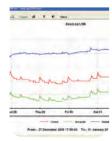
The software allows the following parameters to be configured:

- Logger name
- °C, °F
- Logging rate (1s, 10s, 1m, 5m, 30m, 1hr, 6hr, 12hr)
- Data rollover (Allows unlimited logging periods by overwriting the oldest data when the memory is full)
- · Start date and start time

The latest version of the control software may be downloaded free of charge from

www.omega.com







www.omega.com

OM-EL-USB-1-PRO-A

Temperature Data Logger with Extended Range

DIMENSIONS

All dimensions in mm (inches)



BATTERY REPLACEMENT

We recommend that you replace the battery every 18 months, or prior to logging critical data.

The OM-EL-USB-1-PRO-A does not lose its stored readings when the battery is discharged or when the battery is replaced; however, the data logging process will be stopped and cannot be re-started until the battery has been replaced and the logged data has been downloaded to a PC.

Only use a battery p/n instead (OM-EL-USB-1-PRO-BATT) battery back supplied by Omega, which is rated for use in high temperatures and has the correct battery terminals. Using non-Omega batteries may result in fire or explosion at high temperatures.

Note:

Leaving the OM-EL-USB-1-PRO-A plugged into the USB port for longer than necessary will cause some of the battery capacity to be lost.

WARNING

Handle lithium batteries carefully, observe warnings on battery casing. Dispose of in accordance with local regulations.

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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