

MARATHON PRODUCTS

# EZ Logger

## Humidity & Temperature Data Logger



- USB Connection to PC
- Configuration & Management Software
- User-selectable alarm thresholds
- Measurement intervals from 10 seconds to over 18 hours
- 21CFR: Part 11 software is available
- LEDs indicate logger status
- IP67 protection
- RoHS compliant

This data logger measures and stores up to 16,382 relative humidity and 16,382 temperature readings over 0 to 100%RH and -35 to +80°C (-31 to +176°F) measurement ranges. The user can easily set up the logging rate and start time, and download the stored data by plugging the module straight into a PC's USB port and running the MDAS-Pro software under Windows 2000, XP, Vista or 7. Relative humidity, temperature and dew point (the temperature at which water vapor present in the air begins to condense) data can then be graphed, printed and exported to other applications.

The data logger is supplied complete with a long-life lithium battery, which can typically allow logging for a year. Status indication is via flashing red and green LEDs. The logger is protected against ingress from water and dust to IP67 standard when the plastic cap and seal are fitted.

MDAS-Pro is the configuration and graphing software.

### Marathon offers software for 21 CFR Part 11 Code of the Federal Regulations, as promulgated by the FDA.

Section 21 CFR part 11 establishes the criteria under which the FDA will accept electronic records and electronic signatures as equivalent to paper records and handwritten signatures. To comply all FDA required records under Section 21 CFR Part 11 must be generated by a reliable software that assures the following: record integrity during the retention period, retrievable for FDA inspection, audit trails, limited system access, and use of electronic signatures, as defined by prior guidance.

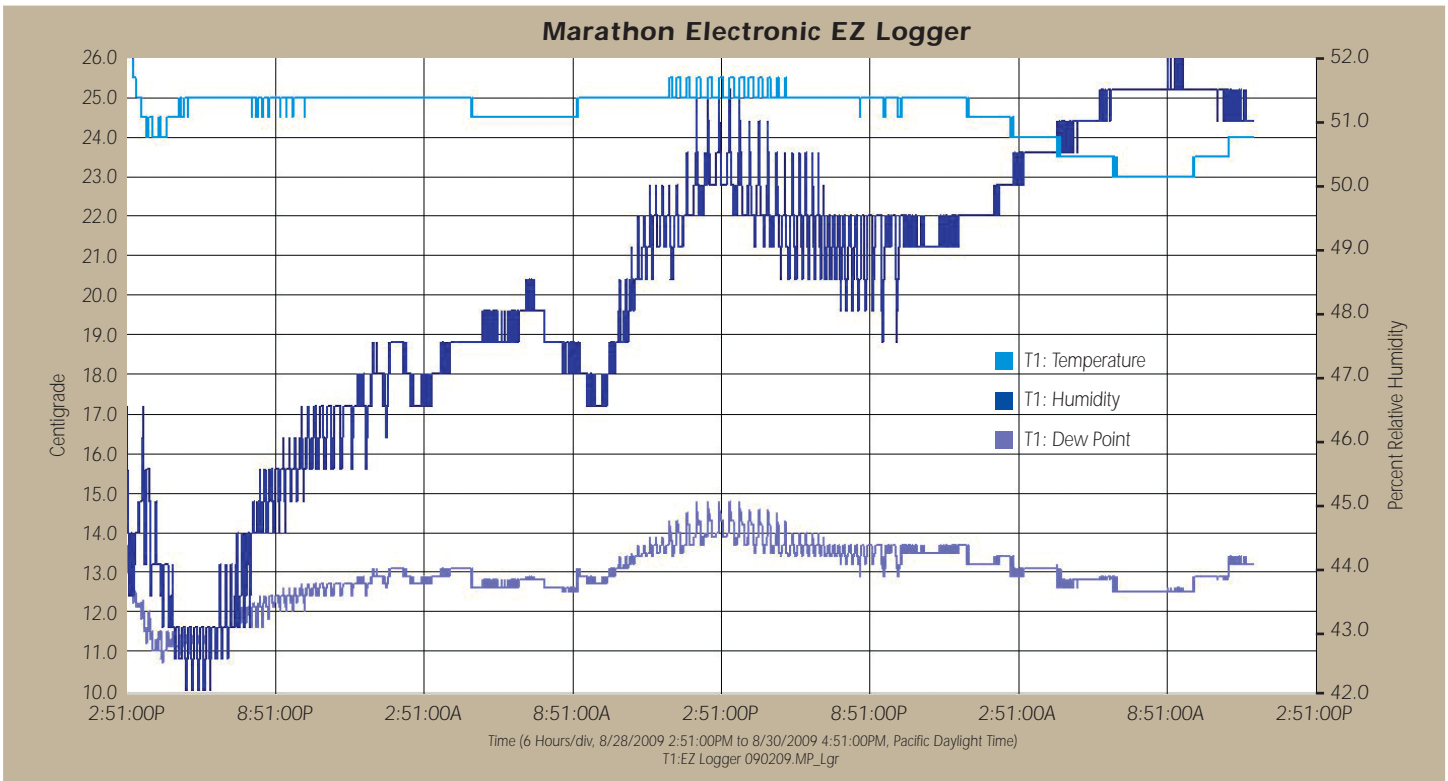
§ 11.10 Controls for closed systems	Comply
§ 11.30 Controls for open systems	Comply
§ 11.50 Signature manifestations	Comply
§ 11.70 Signature/record linking	Comply
§ 11.100 General requirements	Comply
§ 11.200 Electronic signature components and controls	Comply

**Unlike our competition, this is not a web-based program. You do not have to conduct an extensive QA Audit to find out if the program is truly 21 CFR Part 11 compliant.**

MARATHON  
PRODUCTS, INC.

**Don't ship without us!®**

## Example: EZ Logger Humidity-Temperature Plot



EZ Logger Specifications		Min.	Typ.	Max.
Relative Humidity	Measurement range %RH	0		100
	Repeatability (short term) %RH		±0.1	
	Accuracy (overall error) (20-80%RH) %RH		±3.0**	
	Internal resolution %RH		0.5	
	Long term stability %RH		0.5	
Temperature	Measurement range °C (°F)	-35 (-31)		+80 (+176)
	Repeatability °C (°F)		±0.1 (±0.2)	
	Accuracy (overall error) (20-80%RH) °C (°F)		±0.5 (±1)	
	Internal resolution °C (°F)		0.5 (1)	
Dew Point	Accuracy (overall error) (25°C, 40-100%RH) °C (°F)		±1.1 (±2)***	
Logging rate		every 10s		every 12hr
Operating temperature range °C (°F)		-35 (-31)		+80 (+176)
1/2AA 3.6V Lithium Battery Life			1* year	

\*Depending on sample rate, ambient temperatures and use of alarm LEDs

\*\* This specifies the overall error in the logged readings, for relative humidity measurements between 20 and 80%RH

\*\*\* This specifies the overall error in the calculated dew point, for relative humidity measurements between 40 and 100%RH at 25°C

For information on the EZ Logger and MDAS-Pro software please contact Marathon Products.

**Please call 1-510-562-6450 x607**  
for more information or to place an order.

[www.marathonproducts.com](http://www.marathonproducts.com)

[sjperry@marathonproducts.com](mailto:sjperry@marathonproducts.com)