

## MARATHON PRODUCTS

# General Purpose Data Loggers

*Get the facts!*

These multi-use data loggers are a low-cost and effective solution for temperature monitoring of refrigerated vaccines, biological material, chemicals, pharmaceuticals and documenting the transportation of fruits and vegetables. All units share the same basic palm-sized design. Optional probes are available but not required.

The internal thermistor accurately records time and temperatures for user-selectable readings in Celsius, Fahrenheit and Kelvin. The internal software is user programmable and provides the following features: start time delay, sampling intervals, high and low alarm values, recording status, and measurement data.

All our data loggers have the ability to program alarm limits. Should the temperature reach levels outside these limits, the onboard red LED will light until reset by the user. Operation is as easy as pressing the Start button on the recorder.

**The 2c\temp** is our entry level data logger that offers the best value against all competition. You won't find a better product with these features.

**The echo** has the same specifications as the 2c\temp, but includes a built-in audible alarm with a very clear electronic sound which can be heard even under noisy circumstances.

**The 3c\temp** is a mid-range data logger with a generous 8k memory and increased accuracy over the 2c\temp and echo. An excellent general purpose data logger.

Our proprietary IC-9P serial cable is needed to download temperature information to a computer. We also offer a USB to Serial Port adaptor.



### Temperature Range

-29° C to +72° C  
(-20° F to +160° F)

### Temperature Accuracy

(NIST traceable)  
±0.2°C at zero degrees  
±2.0°C at extremes

### Measurement intervals

2 seconds to months

### Memory EEPROM, Storage

4k & 8k memory,

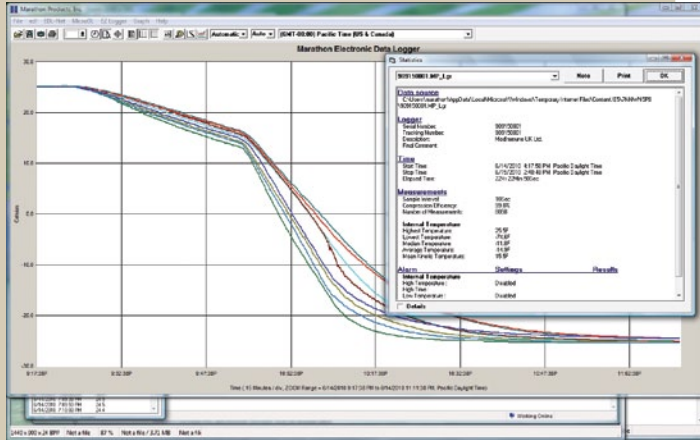
### Number of measurements

Up to 7,600 samples

**MARATHON**  
PRODUCTS, INC.

*Don't ship without us!®*

**Software Highlights:** Easy-to-use software provides clear graphs. Report Summary & Statistics File Manager, Note Attachment, Zoom, Elapsed Time or Date/Time View, Recorded View, Celsius, Fahrenheit or Kelvin, Display 3D View option. Data can be exported to other Windows programs such as spreadsheet, word-processing or database. Language support for Chinese, English, French, German, Japanese, and Portuguese. Available for Windows 98, NT, 2000, ME and XP. An Enterprise Software version and 21CFR Part 11 Compliant Software are available.



MDAS-Pro Temperature Plots with Logger General Information

#### To Order

-29° C to +72° C (-20° F to +160° F)  
 2c\temp -29C  
 echo -29C Alarm  
 3c\temp -29C

IC-9P Cable

USB - Serial Converter Cable

## Specifications

Memory EEPROM, Storage:

2c\temp & echo 4k  
 3c\temp 8k

Temperature Range: -29° C to +72° C (-20° F to +160° F)

Temperature Accuracy:

2c\temp & echo 0.5°C at 20°C, 1.0°C at extremes  
 (0.9°F at 68°F, 2.0°F at extremes)  
 3c\temp 0.2°C at 20°C, 0.5°C at extremes  
 (0.4°F at 68°F, 1.0°F at extremes)

Temperature Resolution:

2c\temp & echo 0.5°C (0.9°F)  
 3c\temp 0.2°C (0.4°F)

Measurement Intervals: Programmable from 2 seconds to months

Temperature Sensor: NIST traceable Precision Thermistor

High and Low Alarm Limits: LED indicator and audible alarm set by temperature and time

Internal Clock Accuracy: Better than 2 minutes per month

Computer Interface: Serial Port RS232 Cable, USB Converter

Internal Software Provides: Start time, Interval, User description, Alarm values, Recording status, Measurement data, Software version, Serial number, Model type

Power Source: Two 3.6 Volt Lithium Battery with a 12 month shelf life. Battery is rated at six months, if used continuously at -80C

Size:

Length 12.85 cm (5.06 in.)  
 Width 6.73 cm (2.65 in.)  
 Depth 1.69 cm (0.66 in.)  
 Weight: 106 g (3.7 oz.)

Warranty:

2c\temp & echo 3 months  
 3c\temp 12 months

CE Certified: CE Marking File

Accessories FLAT-FLEX probe

For information on the 2c\temp, 3c\temp, echo 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**

627 McCormick St., San Leandro, CA 94577 ▪ jperry@marathonproducts.com