

Portable Data Loggers with Display Part of the NOMAD® Family

TRODEKS®



OM-70 Series



Optional

FREE Thermocouple Included!

Model OM-74 Includes a free 1 m (40") Type K insulated beaded wire thermocouple with subminiature connector and wire spool caddy. Order a Spare! Model No. SC-GG-K-30-36.

- ✓ LCD Real Time Display of Temperature (°C or °F), Relative Humidity (% RH, Model OM-73 Only), Time, Date, Alarm Status, Recording Status and Battery Condition
- ✓ User Selectable Stop on Memory Full or Memory Rollover for Continuous Recording
- ✓ PC Delayed Start or Push-Button Recording Control
- ✓ Read Recorded Data on Logger Display
- ✓ Displays Alarm Icon for High/Low Alarm Conditions
- ✓ Nonvolatile EEPROM Memory Retains Data Even if Battery Fails
- ✓ USB Interface for Fast Data Transfer
- ✓ Compact, Light Weight, Easy-to-Use

The OM-70 Series of portable temperature and temperature/humidity data loggers are easy-to-use, versatile devices which can be used for a wide range of logging applications including coolers, freezers, greenhouses, museums,

laboratories, shipping containers, warehouses, environmental monitoring and food storage.

These data loggers are capable of sampling as fast as once per second or as slow as every 18 hours. Models OM-71 and OM-72 can store a total of 43,344 temperature measurements in memory.

Model OM-73 can store a total of 43,344 measurement points for temperature only or 21,672 points of temperature, humidity and dew point. The model OM-74 thermocouple data logger can store 32,638 temperature samples. Easy-to-use Windows software is included with each data logger.

The software is a full-featured program that allows you to set up all data logger functions including sampling rate, logging duration, start mode, logging mode, and high and low temperature alarm values. Once data has been logged, the program then allows you to download data from the logger, plot the data and export the data to an ASCII text or Excel file format for further analysis.

Software Features Include:

- Data summary to read statistics and alarm information in a simplified report format
- Data listing for tabular view of detailed dates, times and values of recorded data
- Graph function displays data in clear graphical format
- Zoom magnifies data with powerful zoom and autoscale functions
- Autoscale function fits data to the screen or allows user to manually enter their own values
- Graphical Cursor displays exact data of any point in the graphical display
- Export data in text or Excel format.
- Print graph or text data with print preview and setup options
- Logger configuration allows easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, alarm setup, and custom ID
- Password protected calibration function automatically stores with parameters in device or restores factory defaults

A calibration Window is provided in the software to simplify the calibration procedure

- Status windows display unique ID of logger, battery voltage, memory used, sample rate, duration, alarm condition and logging status
- Menu Bar along the top of the screen provides one click access to software functions

Specifications

OM-71, OM-72, OM-73

Ambient Temperature

Measurement Range (Models OM-71, OM-73):

-20 to 70°C (-4 to 160°F)

External Sensor Temperature Measurement Range (Model OM-72):

-40 to 70°C (-40 to 160°F)

Storage Temperature:

-40 to 77°C (-40 to 170°F)

Temperature Accuracy:

±0.5°C (±1°F), from -17 to 50°C (1 to 122°F)

Temperature Resolution:

0.1°C (0.05°F)

Relative Humidity Range

(Model OM-73): 0 to 99% RH non-condensing

Relative Humidity Accuracy

(Model OM-73): ±2% RH from 10 to 90% RH @25°C (77°F)

Relative Humidity Resolution

(Model OM-73): 0.05% RH

OM-74

Display Temperature Resolution:

0.1°C (0.2°F) up to 199.9°C or °F, 1°C (1°F) above 200°C or °F

Logged Temperature Resolution:

0.1°C (0.2°F)

Thermocouple Impedance:

50 Ω max for specified accuracy

Cold Junction Temperature

Accuracy: ±0.3°C (±0.5°F)

Operating Temperature:

-18 to 55°C (0 to 131°F)

Storage Temperature:

-30 to 80°C (-20 to 175°F)

GENERAL

Sample Rate: 1 second

to 18 hours user selectable

Thermocouple Temperature Range and Accuracy (OM-74)

Thermocouple	Accuracy ¹	Logger Supported Range ²
K	±0.7°C (1.3°F)	-250 to 1300°C (-418 to 2372°F)
J	±0.6°C (1.0°F)	-170 to 1000°C (-274 to 1832°F)
E	±0.4°C (0.8°F)	-200 to 820°C (-328 to 1508°F)
N	±0.8°C (1.5°F)	-200 to 1300°C (-328 to 2372°F)
T	±0.7°C (1.3°F)	-200 to 400°C (-328 to 752°F)
S	±2.8°C (5.0°F)	-50 to 1760°C (-58 to 3200°F)
R	±2.8°C (5.0°F)	-50 to 1760°C (-58 to 3200°F)
B	±3.3°C (6.0°F)	20 to 1820°C (68 to 3308°F)
C	±1.7°C (3.0°F)	0 to 2320°C (32 to 4208°F)

¹The accuracy given is for the OM-74 unit only. Errors may increase depending on the thermocouple wire grade used. ²The logger supported range is for stored temperature. The logger can only display temperatures up to 1999°F or 1999°C

Alarm Settings:

Over/under alarm with visual indication

LCD Display: Displays temperature, date, time, alarm condition recording status and battery condition

Time Accuracy:

±100 ppm @ 24°C (75°F)

Measurement Capacity:

OM-71, OM-72, OM-73:

Non-volatile memory; 43,344 samples for temperature only, or 21,672 samples for temperature, humidity and dew point (Model OM-73); OM-74: 32,638 temperature samples

Recording Control: Start on button press, immediate after setup, or at a user specified date and time

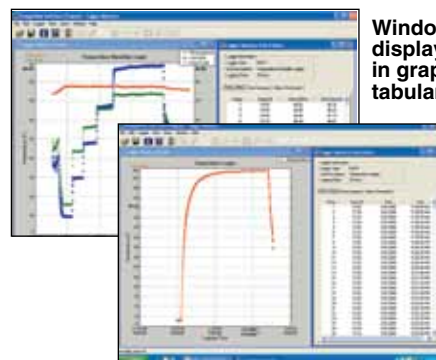
Recording Mode: Stop on memory full, or continuous recording with memory rollover

Minimum System Requirements:

8MB of RAM, 2MB of disk space, 800 x 600 resolution, 1 free USB port

Software Compatibility:

Windows® XP/VISTA/7 and 8 (32- and 64-bit)



Windows software displays data in graphical or tabular format.

Interface: USB 2.0

Power: OM-71, OM-72, OM-73:

3V CR2032 lithium battery (included);

OM-74: 3 AAA batteries (alkaline or lithium (included))

Battery Life: 3 years (average)

Dimensions:

OM-71, OM-72, OM-73:

6 H x 5.7 W x 1.3 cm D (2.36 x 2.24 x 0.51")

OM-74: 5.7 H x 5.5 W x 3.0 cm D (2.25 x 2.15 x 1.2")

Weight: OM-71, OM-72, OM-73:

91 g (3.2 oz)

OM-74: 62 g (2.2 oz)

To Order

Model No.	Description
OM-71	Temperature data logger with display
OM-72	Temperature data logger with display and remote temperature sensor
OM-73	Temperature/humidity data logger with display
OM-74	Thermocouple data logger with display
OM-74-NIST	Thermocouple data logger with display and NIST calibration certificate
OM-71-NIST	Temperature data logger with display and NIST calibration certificate
OM-72-NIST	Temperature data logger with display and remote temperature sensor and NIST calibration certificate
CR-2032	Replacement 3V lithium battery, for OM-71, OM-72 and OM-73
CAL-3-HU	NIST traceable calibration certificate for OM-73