



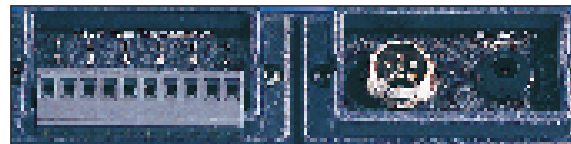
OM-3000 Temperature or Voltage Portable Datalogging System

OM-3000
\$995

- ✓ 128 Kbytes Non-Volatile Memory (approx. 100,000 samples)
- ✓ 240 x 128 Pixel Graphical LCD Screen
- ✓ NiCad Battery Pack
- ✓ RS-232 Interface With Cable Included
- ✓ Built-in Charger and Battery Conditioner
- ✓ Windows Software Included
- ✓ 6 Differential Inputs
- ✓ Programmable Thermocouple or Voltage Inputs



OM-3000



OM-3000 Top View

The OM-3000 datalogger will accept direct input from up to 6 thermocouples or 4 voltage inputs, which can be programmed through the integral keypad. The inputs may be mixed, to a maximum of 6 inputs, provided that only up to 4 of them are voltage. For instance, the OM-3000 can be programmed for 6 thermocouple inputs, or for 4 voltage inputs and 2 thermocouple inputs. The OM-3000 will accept thermocouple types E, J, K and T, as well as voltage ranges of ± 5 Vdc or ± 30 Vdc, with a common mode voltage range of ± 30 Vdc. A large 4.3" x 2.3" integral backlit display with graphic capabilities can be used for on-the-spot measurements for all 6 inputs simultaneously. Input ranges, user-defined session name and sampling intervals are easily programmed via the built-in keypad.

Taking measurements and downloading them to your PC for further analysis or archiving has never been easier. The OM-3000 comes standard with measurement and analysis software for IBM or compatible PC's, which is a sophisticated yet extremely user-friendly program which can be used to measure inputs on all 6 channels, including min and max, bar charts and Y vs time graphs. Sampling intervals may be programmed from 0.2 seconds to 60 hours (for all 6 channels at once). Approximately 100,000 individual samples may be stored in the OM-3000 for downloading. Each recording has a unique time/date stamp, and a user specified name can be entered from the integral keypad.

Communications is established through an RS-232 serial port on the OM-3000, which may be

programmed for baud rates from 9600 to 57,600 bps. A serial cable with a 25 pin female DB-25 connector is included with each OM-3000. If connecting to a 9-pin serial port on an IBM or compatible PC, a 9 to 25 pin adapter is required.

The OM-3000 is powered from a rechargeable NiCad battery pack with an 800mA hour rating at 7.2 Vdc. The OM-3000 will operate for up to 8 hours, with backlight off and up to 5 hours with backlight on with a full charged battery. The unit may operate continuously if left connected to AC power. An integral dual rate charger is capable of charging the NiCad battery pack in approximately 1.25 hours. In addition, the internal battery combats NiCad memory effect.



OM3000 shown with Windows software, battery charger plug pack, RS-232 cable and complete operator's manual.

Specifications

Input Ranges (Differential Inputs)

Temperature:

(each input can be individually programmed for any of these thermocouple types)

E Type T/C: -418 to +1823°F (-250 to +995°C)

J Type T/C: -346 to +2183°F (-210 to +1195°C)

K Type T/C: -418 to +2498°F (-250 to +1370°C)

T Type T/C: -418 to +743°F (-250 to +395°C)

Voltage: ±5 Vdc and ± 30 Vdc (User Selectable)

Common Mode: ±30 Vdc

Resolution

Temperature:

0.1°F or °C; 1°F or °C below -148°F (-100°C)

Voltage: ± 5 Vdc: 200 μV (.0002 V),
± 30 Vdc: 2 mV (.002 V)

Accuracy

Temperature: ±0.1% of reading ±0.9°F (0.5°C) above -148°F (-100°C); ±1.0% of reading ±0.9°F (0.5°C) below -148°F (-100°C)

Voltage: ±0.3% of reading ± 3 counts

Common Mode Error:

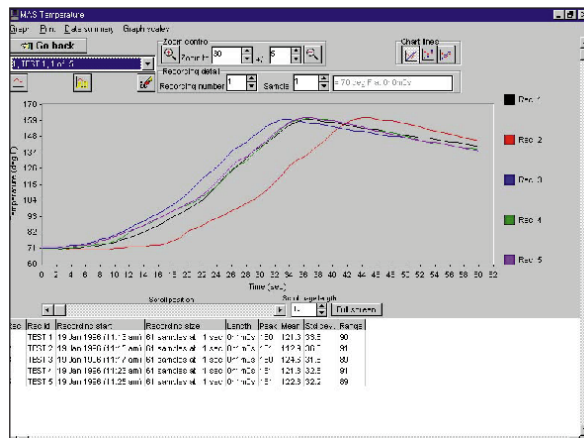
±0.1% of common mode voltage

Data Logging: 128 Kilobytes

(Approx 100,000 individual samples)

Minimum Sampling Interval

# of Channels Selected (User Selectable)	Voltage Channel only Selected (Seconds)	Temp. or Temp. and Voltage Selected (Seconds)
1	0.2	0.2
2	0.3	0.3
3	0.4	0.5
4	0.5	0.6
5		0.7
6		0.8



OM-3000 Sample screen graph showing five temperature inputs versus time.

Communications:

RS-232; 4800, 9600, 19200-bits per second

Termination: SMP female accepts miniature thermocouple twin blade plug SMP male. Screw Terminals for voltage inputs only.

Input Impedance:

Temperature: 100kΩ for first 4 channels, 30 kΩ for last 2 channels.

Voltage: 2MΩ

Isolation: 50 Vdc Between inputs and electronics. (no isolation between channels)

Battery:

Type: nickel cadmium pack

Voltage: 7.2 Volts nominal

Capacity: 800 mAh nominal

Operating Time: 8 hours with backlight off, 5 hours with backlight on nominal

Unit may be operated continuously if powered by ac.

Charger and Conditioner

Fast Charge Rate: 0.7 A nominal

(1.25 hours for complete charge nominal)

Discharge Rate: 0.5 A nominal

Mechanical and Environmental

Size: 9.0"W x 6.0"L x 2.6"H

(230 x 153 x 67mm)

Weight: 3 lb (1.35 kg)

Operating Temperature: 32 to 122°F (0 to 50°C)

Operating Humidity: 80% RH non-condensing max

Storage Temperature and Humidity:

14 to 140°F (-10 to 60°C) / 95% RH

To Order (Specify Model Number)

Model No.	Price	Description
OM-3000	\$995	Portable thermocouple and voltage datalogger
OM-3000-SC	15	Soft fabric carrying case. Will contain logger and accessories

Each unit is supplied with Windows software, battery charger plug pack, RS-232 cable and complete operator's manual.

Ordering Example: OM-3000, portable thermocouple and voltage datalogger, plus OM-3000-SC soft fabric carrying case, \$995 + 15 = \$1010.