

## Portable Handheld Data Logger

OM-2041



- ✓ Input Signals: K, E, J, T, 0 to 5 V, and 0 to 20 mA (Process Signals Need Input Adaptor)
- ✓ Simultaneous 4-Channel Measurement and Display
- ✓ High/Low Alarms for Each Channel
- ✓ Computation: Maximum/Minimum/Average
- ✓ Logging Method: Log Mode and Tag Mode
- ✓ Data Processable Through a Personal Computer
- ✓ NEMA 3 Protection
- ✓ "AA" Battery Power Supply

The handy OM-2041 is a palm-size data logger capable of storing up to 10,000 data records per channel. Powered by either "AA" batteries or an AC adaptor, the OM-2041 works equally well as a portable or a fixed-location logger.

With the exclusive software, recording/recalling of data and programming of logging parameters can be done directly with the logger or through a personal computer.

### Specifications MEASURING RANGE

#### Thermocouple:

K: -200.0 to 1370.0°C (-328.0 to 2498.0°F)

E: -200.0 to 700.0°C (-328.0 to 1292.0°F)

J: -200 to 700.0°C (-328.0 to 1292.0°F)

T: -200.0 to 400.0°C (-328.0 to 752.0°F)

**DC Voltage:** 0 to 5 V (scale -9999 to 9999)

**DC Current:** 0 to 20 mA (scale -9999 to 9999)

#### ACCURACY RATING

#### Thermocouple:

**100°C or More:** ( $\pm 0.1\%$  of measuring value  $+0.3^\circ\text{C}$ )

**100°C or Less:** ( $\pm 0.1\%$  of measuring value  $+0.6^\circ\text{C}$ )

**DC Voltage:** ( $\pm 0.1\%$  of measuring value  $+0.2\%$  of range)

#### Reference Junction Compensation Accuracy:

$\pm 0.4^\circ\text{C}$  (at ambient temperature 15 to  $35^\circ\text{C}$ );

$\pm 0.7^\circ\text{C}$  (at ambient temp. -10 to 15, 35 to  $50^\circ\text{C}$ )

**Temperature Drift:**  $\pm 0.01\%/^\circ\text{C}$  of measuring range

#### Allowable Signal Source Resistance:

100  $\Omega$  (burnout over upper limit)

**Input Resistance:** DC voltage inputs over 1 M $\Omega$

**Withstand Voltage Between Channels:** 400 Vac

**Measuring Cycle:** 1 second/4 channels

#### Logging Interval:

1 second to 30 seconds (1 second steps);

1 minute to 24 hours (1 minute steps)

#### Logging Data:

**Log Mode:** 10,000 data records/channel

**Tag Mode:** 5500 data records/channel



**Display:** LCD with backlight  
Dot-matrix 128 x 64 dot (view area 41 x 29 mm)

**Operation Key:** 18-key including numeric key

#### Logging Method:

**Log Mode:** Logging data per cycle (20 points) in log area

**Tag Mode:** Logging data (20 points), then press the trigger in tag area

**Display Contents:** Measured value, alarm, maximum/minimum/average value, computation value, etc.

**Other Functions:** Clock (year, month, day/hour, minute, second), auto power-off, reading correction, backlight, buzzer, residual battery, residual memory, alarm, calculation, key lock, etc.

**Communications:** RS232C or USB

**Power Supply:** 4 "AA" batteries (included) or AC adaptor (100 to 240 Vac)

**Battery Life:** 500 hours or longer (at 25°C, 1-minute interval)

**Backup Battery:** Backup log data, setting and clock by lithium battery

**Backup Battery Life:** 5 years or longer (at 25°C)

**Dimensions:** 159 H x 70 W x 33 mm D (6.2 x 2.7 x 1.3") excluding protrusions

**Weight:** Approx 300 g (10.5 oz) including batteries

**Casing Material:** Nylon ABS (antibacterial)

**Ambient Temperature:** -10 to 50°C (14 to 122°F)

**Ambient Humidity:** 10 to 80% RH (no condensation)

**CE Approval:** EN-61326, Class B (battery operation)

**Protection:** NEMA 3

**Accessories:** 4 "AA" batteries, wall-mount holder (included)

## To Order

Model No.	Description
OM-2041-USB	4-channel handheld data logger with USB port
OM-2041-C2	4-channel handheld data logger with C2 port
OM-SPT-USB	Software with USB cable
OM-SPN-C2	Software with RS232C cable

## Accessories

Model No.	Description
OM-9407	Current input adaptor
OM-9408	Voltage input adaptor
OM-AC	AC adaptor

## General Purpose Miniature Probes with Miniature Connectors



MEETS OR EXCEEDS  
SPECIAL LIMITS  
OF ERROR (SLE)  
AND EN 60584-2:  
Tolerance Class 1

Must-Have  
Accessory!

Shown smaller  
than actual size.

Miniature connector  
standard.

- ✓ Works Great with Handheld Instruments
- ✓ 150 mm (6") Length Standard†
- ✓ 3.2 mm (1/8") OD 304 SS Sheath
- ✓ Molded Junction Rated to 220°C (425°F)
- ✓ Color-Coded to Calibration
- ✓ 300 mm (12") Retractable Cable Expands to 1.2 m (48")
- ✓ SMPW Male Connector Termination

The molded miniature probe works with most handheld thermocouple meters. Its color-coded retractable cable will stretch from 300 mm (12") to 1.2 m (48"). Grounded junction probes are suited for applications involving benchtop meters or oscillating machines. Calibration codes J, K, T, and E are available.

Thermocouple Alloy		Model No. ANSI Color Code
Iron-Constantan	J	JTSS-HH
CHRTRODEKS® - ALTRODEKS®	K	KTSS-HH
CHRTRODEKS® - Constantan	E	ETSS-HH
Copper-Constantan	T	TTSS-HH

**Note:** Hot end junction grounded.

† Other lengths are available, consult Sales department.

**Ordering Example:** KTSS-HH, Type K thermocouple probe, 150 mm (6") long, 3.2 mm (1/8") dia with 1' of RSC cable (which stretches to 5') with a molded, miniature male thermocouple connector.