

Model AM-8000 series

Compact Thermologger



Model AM-8000 series thermometers are compact handheld units that store measurement data in memory. Data held in memory can then be transferred to a PC via dedicated software for later analysis or other use.

AM-8000模式系列

AM-8000模式系列产品是简便型温度数据记录器。可以记忆储存测试数据并通过专用软件转送到电脑中进行数据处理。

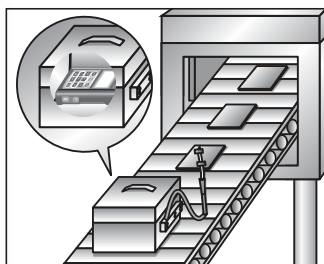
AM-8000シリーズは、ハンディタイプの温度データロガーです。計測データをメモリ専用ソフトにてパソコンへ転送することで、データ処理が可能です。

6ch

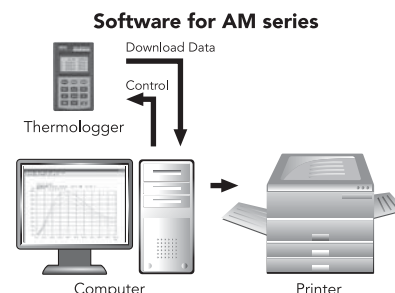
12ch



TB



AMS-850



Features

- **Interface**
The link to the PC is by USB or RS-232C.
- **Number of inputs**
6ch model (capable of storing 60,000 measurements) or 12ch model (capable of storing 120,000 measurements)
- **Input type**
A multi-function temperature / voltage model is also available for simultaneous recording of temperature and voltage.
- **Interval**
The high-speed model is capable of measuring at 100ms intervals.
*Except remote measurement.

TB-6002

Heat-resistant box for 6ch model

Application limit : 300°C/20min
External dimensions :
220 (W) × 175 (H) × 315 (D) mm
(not including protrusions)
Weight : approx. 10kg

TB-6003-SP13

Waterproof box for 6ch model

Application limit : 100°C/60min
External dimensions :
170 (W) × 135 (H) × 405 (D) mm
(not including protrusions)
Weight : approx. 5.5kg

*The above products are sold separately.
Please contact us for more information.

Software specifications

The software enables use of data on a PC.

- **Graph production**
- **Formatted document output**
- **csv file output**

Compatible OSs

Windows 98SE / Me / NT4.0 (SP3 or more) / 2000 / XP

*For English OS only
*Software is sold separately.

Kind of AM-8000 series

Model		Interface		Number of inputs		Input type		Interval	
Type K	Type E	USB	RS-232C	6ch.	12ch.	Temp.	V	Normal	High speed
AM-8000K	AM-8000E	●		●		●		●	
AM-8001K	AM-8001E	●		●		●		●	●
AM-8050K	AM-8050E	●		●		●	●	●	
AM-8051K	AM-8051E	●		●		●	●	●	●
AM-8010K	AM-8010E	●			●	●		●	
AM-8011K	AM-8011E	●			●	●		●	●
AM-8060K	AM-8060E	●			●	●	●	●	
AM-8061K	AM-8061E	●			●	●	●	●	●
AM-8100K	AM-8100E		●	●		●		●	
AM-8101K	AM-8101E		●	●		●		●	●
AM-8150K	AM-8150E		●	●		●	●	●	
AM-8151K	AM-8151E		●	●		●	●	●	●
AM-8110K	AM-8110E		●		●	●		●	
AM-8111K	AM-8111E		●		●	●		●	●
AM-8160K	AM-8160E		●		●	●	●	●	
AM-8161K	AM-8161E		●		●	●	●	●	●

Specifications

6ch. model

Model	AM-8000	AM-8001	AM-8100	AM-8101	AM-8050	AM-8051	AM-8150	AM-8151
Input type	Temperature				Temperature / DC Voltage			
Measurement range	*TABLE I				Temperature : *TABLE I DC Voltage : ±19.999V			
Resolution	0.1℃ / 1℃ (fixed)				Temperature : 0.1℃ / 1℃ (fixed) DC Voltage : 0.001V			
Measurement accuracy	*TABLE II				Temperature : *TABLE II DC Voltage : ±0.06% of reading + 0.02% of F/S			
Memory capacity	60,000 data							
High-speed interval	1 sec.	0.1 sec.	1 sec.	0.1 sec.	1 sec.	0.1 sec.	1 sec.	0.1 sec.
Interface	USB1.1		RS-232C		USB1.1		RS-232C	
Dimensions / Weight	92 (W) × 155 (H) × 36 (D) mm / approx. 380g (including dry batteries)							

12ch. model

Model	AM-8010	AM-8011	AM-8110	AM-8111	AM-8060	AM-8061	AM-8160	AM-8161
Input type	Temperature				Temperature / DC Voltage			
Measurement range	*TABLE I				Temperature : *TABLE I DC Voltage : ±19.999V			
Resolution	0.1℃ / 1℃ (fixed)				Temperature : 0.1℃ / 1℃ (fixed) DC Voltage : 0.001V			
Measurement accuracy	*TABLE II				Temperature : *TABLE II DC Voltage : ±0.06% of reading + 0.02% of F/S			
Memory capacity	120,000 data							
High-speed interval	1 sec. 0.2 sec.		1 sec. 0.2 sec.		1 sec. 0.2 sec.		1 sec. 0.2 sec.	
Interface	USB1.1		RS-232C		USB1.1		RS-232C	
Dimensions / Weight	96 (W) × 160 (H) × 60 (D) mm / approx. 480g (including drv batteries)							

Common specifications

Input connector	ANP connector (Miniature plug)
Reference junction compensation accuracy	$\pm 0.3^\circ C$ (at $25^\circ C \pm 10^\circ C$)
Temperature coefficient	$\pm (0.01\% / ^\circ C)$ of measurement range except $25^\circ C \pm 10^\circ C$
Interval time	Standard mode : 1 second to 99 minutes 59 seconds High-speed mode (6ch.model) : 0.10 seconds to 0.99 seconds High-speed mode (12ch.model) : 0.20 seconds to 0.99 seconds In the case of remote measurement through a PC : 1 second to 99 minutes 59 seconds
Signal source resistance	Temperature : 500 Ω or less (standard mode), 100 Ω or less (high-speed mode) DC Voltage : Input impedance app. 2M Ω or less
Safe excitation voltage	Between input pins on same channels : $\pm 10V$ DC (temperature), $\pm 30V$ DC (Voltage) Between input pins on adjacent channels : $\pm 60V$ AC
Linearizer	Digital Linearizer method (Compliant with IEC 60584-1 (1995))
Interface	USB 1.1 MINI-B or RS-232C
Display	Graphic liquid crystal display, 128 \times 64 dots (55 \times 27mm)
Operational environment	0 \sim 40°C, 20 \sim 80%RH (Without dew)
Storage environment	-10 \sim 50°C, 10 \sim 90%RH (Without dew)
Power supply	4*AA* (LR6) Alkali Batteries Option : AC-Adaptor
Accessories	Manual, Softcase, 4 batteries, Communications cable (USB or RS-232C)
Option	AC-Adaptor, Special data analysis software (AMS-850), Carrying case

***TABLE I (Measurement range)**

Type	1°C Range	0.1°C Range
E	-200 \sim 800°C	-100.0 \sim 500.0°C
K	-200 \sim 1370°C	
J	-200 \sim 1100°C	
T	-200 \sim 400°C	
R	0 \sim 1760°C	—

***TABLE II (Measurement accuracy)**

Type	Resolution	Measurement range	Measurement accuracy
E, K, J, T	1°C	0°C \sim	$\pm (0.1\%$ of reading + 1°C)
		-100 \sim -1°C	$\pm (0.5\%$ of reading + 1°C)
		-200 \sim -101°C	$\pm (1\%$ of reading + 2°C)
	0.1°C	0.0°C \sim	$\pm (0.1\%$ of reading + 0.3°C)
R	1°C	-100.0 \sim -0.1°C	$\pm 0.5^\circ C$
		0°C \sim 1760°C	$\pm (0.1\%$ of reading + 3°C)

***TABLE III (Battery life)**

Interval	0.1sec	1sec	10sec	10min
Battery life	approx. 20h	approx. 40h	approx. 80h	approx. 240h

※Note:When operated with alkaline AA-size dry batteries at 25°C type.

●Option

AC-Adaptor
A-100/240-HR
(for AC100 \sim 240V)



CE

AC-Adaptor
A-115-200-HR (for AC115V)
A-220-200-HR (for AC220V)



Not CE-approval

Carrying case



●Accessories



Soft case
SC-6
SC-12

Communication cable
AM-USB (for USB)



for AM-80**

Communication cable
AM-RS9 (for RS-232C)



for AM-81**