Model AM-8000 series
Compact Thermologger
CE

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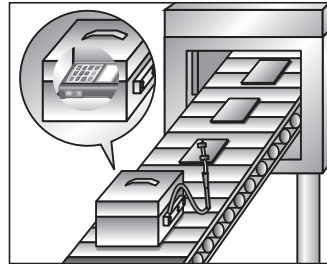AM-8000模式系列产品是简便型温度数据记录器。
可以记忆储存测试数据并通过专用软件转送到电脑中进行数据处理。

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。
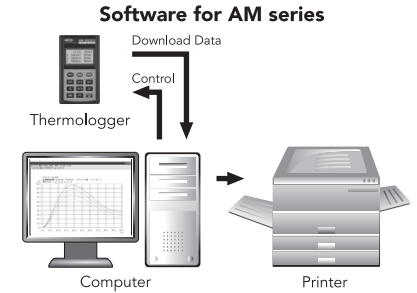計測データをメモリし専用ソフトにてパソコンへ転送することで、
データ処理が可能です。

6ch   **12ch**

TB   **AMS-850**

Software for AM series

Download Data
Control
Thermologger
Computer   Printer

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℃/20min
External dimensions：
  320（W）×190（H）×250（D）mm
  （not including protrusions）
Weight：approx. 10kg

TB-6003-SP13＊
Waterproof box for 6ch model
（For the container to φ98mm）
Application limit：100℃/60min
External dimensions：
  205（W）×155（H）×405（D）mm
  （not including protrusions）
Weight：approx. 8kg

  ＊in Type denotes the type of thermocouple
  （E or K）

＊ 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

Microsoft® Windows® XP（SP.3 or newer）, Windows Vista®, Windows®7（for English）

＊ All PCs under the recommended environment are not guaranteed to work successfully with AMS-850.
＊ AMS-850 can be used only by the user that has a system administrative right（Administrator）.
＊ AMS-850 does not support Mac OS.
＊ Microsoft® Windows® XP, Windows Vista®, Windows®7 and Excel® are registered trademarks of Microsoft Corporation in the United States and other countries.
＊ Software is sold separately.

Function 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 [Protruded parts excluded] / 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 [Protruded parts excluded] / approx. 480g [Including dry batteries]							

Common specifications

Input connector	ANP connector (Miniature plug)	
Reference junction compensation accuracy	±0.3℃ at 25℃±10℃	
Temperature coefficient	± (0.01% / ℃) of measurement range except 25℃±10℃	
Time interval	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 : 500Ω or less (standard mode), 100Ω or less (high-speed mode) DC Voltage : Input impedance app. 2MΩ or less	
Safe excitation voltage	Between input pins on same channels : ±10V DC (temperature), ±30V DC (Voltage) Between input pins on adjacent channels : ±60V AC	
Linearlizer	Digital Linearlizer method (Compliant with IEC 60584-1 (1995))	
Interface	USB 1.1 MINI-B or RS-232C	
Display	Graphic liquid crystal display, 128×64 dots (55×27mm)	
Environment — Operation	0～40℃, 20～80%RH (Non condensing)	
Environment — Storage	−10～50℃, 10～90%RH (Non condensing)	
Power supply	4 AA Alkaline batteries or AC-Adapter (Option accessories)	
Supplied accessories	4 AA Alkaline batteries, Test report, Manual, Softcase, Communications cable (USB or RS-232C)	
Optional accessories	AC-Adapter, Special data analysis software (AMS-850), Carrying case	
Compatible standards	CE Making, RoHS	

*TABLE I (Measurement range)

Type	1℃ Range	0.1℃ Range
E	−200～ 800℃	−100.0～500.0℃
K	−200～1370℃	
J	−200～1100℃	
T	−200～ 400℃	−100.0～400.0℃
R	0～1760℃	—

※Switches automatically to 1℃ resolution range when measured temperatures fall outside the 0.1℃ resolution range.

*TABLE II (Measurement accuracy)

Type	Resolution	Measurement range	Measurement accuracy
E, K, J, T	1℃	0℃～	± (0.1% of reading + 1℃)
		−100～−1℃	± (0.5% of reading + 1℃)
		−200～−101℃	± (1% of reading + 2℃)
	0.1℃	0.0℃～	± (0.1% of reading + 0.3℃)
		−100.0～−0.1℃	± 0.5℃
R	1℃	0℃～1760℃	± (0.1% of reading + 3℃)

Not including reference junction compensation accuracy, at 25℃±10℃

*TABLE III (Battery life)

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

※Note:When operated with AA Alkaline batteries at 25℃ typ.

●Supplied accessories

Soft case
SC-6
SC-12

Communication cable
AM-USB (for USB)

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

for AM-80**

for AM-81**

●Optional accessories

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

Carrying case

Not CE-approval