

# Compact Thermologger

6&12ch. Input hand held logger / 6通道, 12通道简便型温度记录仪

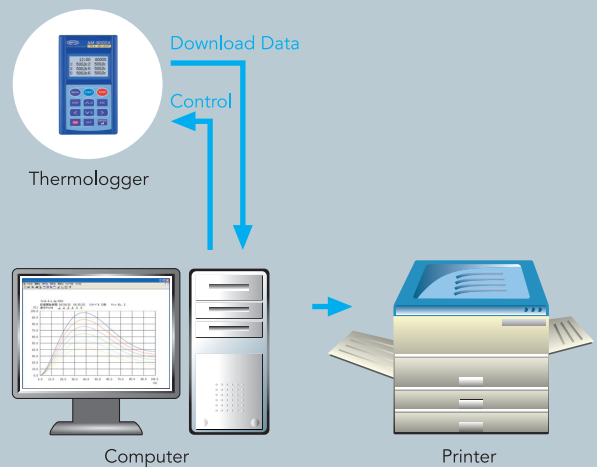
**AM-8000 Series** CE



The Compact Thermologger "AM-8000 Series" is a temperature measurement instrument with multichannel memory functions. Data from temperature probes and voltage inputs is stored in the Compact Thermologger internal memory. The stored data can be transferred to a personal computer via USB or RS-232C and used for, e.g., making graphs or tables.

简便型温度记录仪AM-8000系列是多通道的温度测量仪器。可同时测量6或12通道的温度以及直流电压。并且可将数据记录到本体内存。通过USB或者是RS-232C将数据传送到电脑,进行制表作图。

## Software for AM series



**ANRITSU** ANRITSU METER CO.,LTD.



# INSTRUMENT 主体



6ch.

## Multiple functions and multi channel

### Features

- **Interface is USB or RS-232C**  
(It is selection at the time of purchase.)  
可通过USB或RS-232C通信  
(请在订货时选择)
- **Memory capacity :**  
**60,000 data for the 6ch. model,**  
**120,000 data for the 12ch. model**  
内存容量：  
6通道机型为60000数据,12通道机型为120000数据
- **High accuracy**  
高性能
- **Easy to read measured value by LCD display**  
LCD显示屏
- **Simultaneous display of measured value**  
(One of the measured values can also be indicated by expansion.)  
可同时显示6通道的温度,也可放大显示任意通道的温度
- **Easy operation by 12 keys**  
操作简单



12ch.

Select the most appropriate one to your measuring purpose from 16 types

可根据用途从16个种类中选择1台。

## AM-8000K

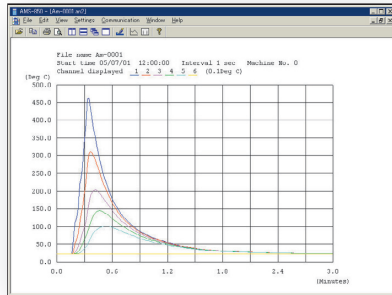
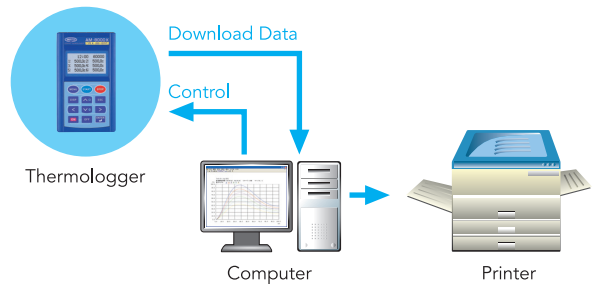
Interface 通信功能	0 : USB 1.1
	1 : RS-232C
Input Type 输入	0 : 6ch. Temperature (温度)
	1 : 12ch. Temperature (温度)
	5 : 6ch. Temperature (温度) & DC Voltage (直流电压)
	6 : 12ch. Temperature (温度) & DC Voltage (直流电压)
Interval time 间隙时间	0 : 1s ~ 99m,59s / 1s step
	1 : (standard mode) 1s ~ 99m,59s / 1s step
	(high-speed mode) 0.10s ~ 0.99s / 0.01s step (6ch. model) 0.20s ~ 0.99s / 0.01s step (12ch. model)
Thermocouple type 热电偶的种类	E : Type E
	K : Type K
	J : Type J
	T : Type T
	R : Type R

# SOFTWARE [OPTION] 软件(另购)

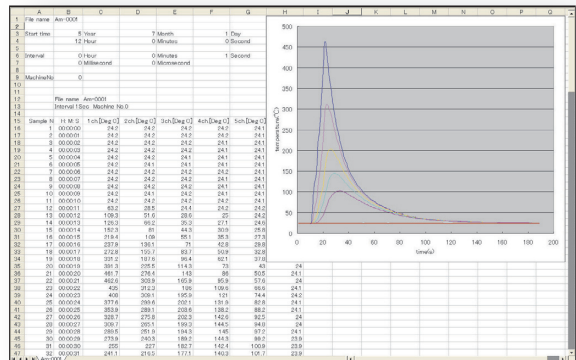
AMS-850 is the software that allows you to download data from the Compact Thermologger to a personal computer, easily make graphs, tables, or CSV files, and print the data.

AMS-850是读取数据的专用解析软件。也可进行简单的制表作图操作。

## Software for AM series



Sample No.	H	M	S	Sub	Ch1	Ch2	Ch3	Ch4	Ch5	Ch6
000001	00	00	00	24.2	24.2	24.2	24.2	24.1	24.1	24.1
000002	00	00	02	24.2	24.2	24.2	24.2	24.1	24.1	24.1
000003	00	00	04	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000004	00	00	06	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000005	00	00	08	24.2	24.2	24.1	24.1	24.1	24.1	24.2
000006	00	00	10	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000007	00	00	12	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000008	00	00	14	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000009	00	00	16	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000010	00	00	18	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000011	00	00	20	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000012	00	00	22	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000013	00	00	24	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000014	00	00	26	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000015	00	00	28	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000016	00	00	30	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000017	00	00	32	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000018	00	00	34	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000019	00	00	36	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000020	00	00	38	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000021	00	00	40	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000022	00	00	42	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000023	00	00	44	24.2	24.2	24.2	24.2	24.1	24.1	24.2
000024	00	00	46	24.2	24.2	24.2	24.2	24.1	24.1	24.2



The data files made by AMS-850 can be converted into CSV files for use in Excel or other spreadsheet software.

通过AMS-850软件,可将储存的数据转换为CSV文件,则可以应用Excel进行简单的数据分析。

## Operational environment of software (AMS-850)

OS	Microsoft® Windows® XP (SP.3 or newer), Windows Vista®, Windows® 7 (for English) (AMS-850 does not support 64 bit edition of OS.)
Memory	64MB or more (Operational environment of corresponding OS)
HDD	Min. 5MB of free space (Operational environment of corresponding OS)
Monitor	Min. resolution of 800 X 600 pixels

- \* 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.

# HEAT-RESISTANT BOX / WATERPROOF BOX [OPTION]

## 耐热外壳 / 防滴外壳

### TB-6002\* (heat-resistant box for 6ch.model)

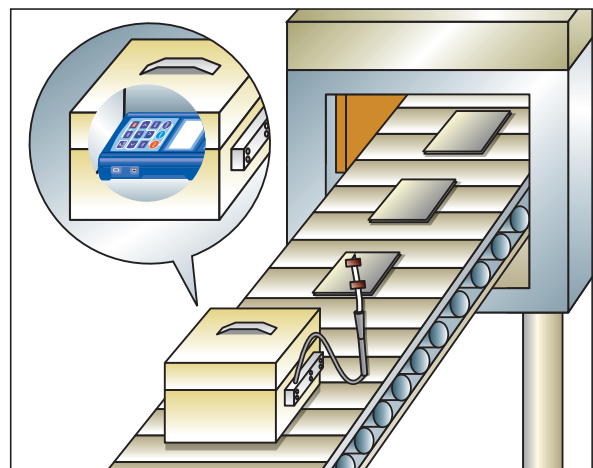
Use limit	300°C / 20minutes
Dimensions	320(W) X 190(H) X 250(D) (Protruded parts excluded)
Weight	App. 10 Kg

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

### TB-6003-SP13\* (waterproof box for 6ch.model) (For the container to φ98mm.)

Use limit	100°C / 60minutes
Dimensions	205(W) X 155(H) X 405(D) (Protruded parts excluded)
Weight	App. 8 Kg

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



# SPECIFICATIONS 技术规格

## 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 : $\pm 19.999V$			
Resolution	0.1°C / 1°C (fixed)				Temperature : 0.1°C / 1°C (fixed) DC Voltage : 0.001V			
Measurement accuracy	*TABLE II				Temperature : *TABLE II DC Voltage : $\pm(0.06\%$ of reading + 0.02% of measurement range)			
Memory capacity	60,000 data							
High-speed interval	1 second	0.1 seconds	1 second	0.1 seconds	1 second	0.1 seconds	1 second	0.1 seconds
Interface	USB1.1		RS-232C		USB1.1		RS-232C	
Dimensions / Weight	92(W) × 155(H) × 36(D) mm [Protruded parts excluded] / App. 380 g [Including dry batteries]							

Note : \* in Type denotes the type of thermocouple (E, K, J, T or R)

## 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 : $\pm 19.999V$			
Resolution	0.1°C / 1°C (fixed)				Temperature : 0.1°C / 1°C (fixed) DC Voltage : 0.001V			
Measurement accuracy	*TABLE II				Temperature : *TABLE II DC Voltage : $\pm(0.06\%$ of reading + 0.02% of measurement range)			
Memory capacity	120,000 data							
High-speed interval	1 second	0.2 seconds	1 second	0.2 seconds	1 second	0.2 seconds	1 second	0.2 seconds
Interface	USB 1.1		RS-232C		USB 1.1		RS-232C	
Dimensions / Weight	96(W) × 160(H) × 60(D) mm [Protruded parts excluded] / App. 480 g [Including dry batteries]							

Note : \* in Type denotes the type of thermocouple (E, K, J, T or R)

## 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 $25^\circ C \pm 10^\circ C$	
Time interval	Standard mode : 1 second ~ 99 minutes, 59 seconds High-speed mode : 0.10 seconds ~ 0.99 seconds (6ch.model), 0.20 seconds ~ 0.99 seconds (12ch.model)	
Signal source resistance	Temperature : $500\Omega$ or less (standard mode), $100\Omega$ or less (high-speed mode) DC Voltage : Input impedance app. $2M\Omega$ or less	
Safe excitation voltage	Between input pins on same channels : $\pm 10V$ DC (temperature), or $\pm 30V$ 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 / RS-232C (selected at purchase)	
Display	Graphic liquid crystal display, 128 × 64 dots (55 × 27 mm)	
Environment	Operation	0 ~ $40^\circ C$ , 20 ~ 80%RH (Non condensing)
	Storage	-10 ~ $50^\circ C$ , 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)	
Option accessories	AC-Adapter (*TABLE IV), Special data analysis software (AMS-850), Carrying case	
Compatible standards	CE Making, RoHS	

\*TABLE I (Measurement range)

Thermocouple type	1°C Resolution	0.1°C Resolution *
Type E	-200 ~ $800^\circ C$	
Type K	-200 ~ $1370^\circ C$	-100.0 ~ $500.0^\circ C$
Type J	-200 ~ $1100^\circ C$	
Type T	-200 ~ $400^\circ C$	-100.0 ~ $400.0^\circ C$
Type R	0 ~ $1760^\circ C$	

\* Switches automatically to 1°C resolution range when measured temperatures fall outside the 0.1°C resolution range.

\*TABLE II (Measurement accuracy)

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

Not including reference junction compensation accuracy, at  $25^\circ C \pm 10^\circ C$

\*TABLE III (Battery life)

Set interval	0.1 seconds	1 second	10 seconds	10 minutes
Battery life	App. 20 h	App. 40 h	App. 80 h	App. 240 h

Note : When operated with AA Alkaline batteries at  $25^\circ C$  typ.

\*TABLE IV (AC-Adapter (Option accessories))

AC Voltage	Model
115V	A-115-200-HR
220V	A-220-200-HR-R

Note : Not "CE" approval.



**ANRITSU METER CO.,LTD.**

2-4-5, Shimomeguro,  
Meguro-ku, Tokyo 153-0064,  
JAPAN

Phone : 81-3-3491-9181

Fax : 81-3-3493-6729

e-mail : sales@anritsu-meter.co.jp

http://www.anritsu-meter.com