

# Model HA series

High Accuracy Thermometer



Model HA series thermometers allow easy temperature measurement.

These general-purpose thermometers can be used for on-site temperature measurement and various other applications.

## HA模式系列

HA模式系列产品是简便型温度感应器，可快速方便地测试温度。可在工地等场合随时测试温度，使用广泛。

HAシリーズは、簡単に温度測定が出来るハンディタイプの温度計測器です。現場での温度チェックなど、汎用的にご利用いただけます。

HA-150K  
HA-150E



HA-150K

HA-250K  
HA-250E



HA-250K

HA-350K  
HA-350E



HA-350K

HA-450K  
HA-450E



HA-450K

## FUNCTION



Back Light function



Resolution 0.1°C/1°C



Automatic Power Off function



Calibration function



Hold the displayed data



Alarm output, signal and display



Peak (MAX) and Valley (MIN) are indicated at sub-display



1°C 1mV Analog signal output model 10mV/°C or 1mV/°C



**HA-\*5\***  
ANP type of Input connector  
(HA-150, 250, 251, 252, 350, 351, 352, 450, 650, 750)



**HA-\*0\***  
ASP type of Input connector  
(HA-100, 200, 201, 202, 300, 301, 302, 400)

## Kind of HA-series

ASP model	ANP model	DISPLAY	LIGHT	AUTO OFF	HOLD	P/V HOLD	1/0.1	CAL	ALARM	ANALOG	°C / °F
HA-100E	HA-150E	LCD		●	●						°C
HA-100K	HA-150K	LCD		●	●						°C
HA-200E	HA-250E	LCD	●	●	●	●	●				°C
HA-200K	HA-250K	LCD	●	●	●	●	●				°C
HA-201E	HA-251E	LCD	●	●	●	●	●			1mV/°C	°C
HA-201K	HA-251K	LCD	●	●	●	●	●			1mV/°C	°C
HA-202E	HA-252E	LCD	●	●	●	●	●			10mV/°C	°C
HA-202K	HA-252K	LCD	●	●	●	●	●			10mV/°C	°C
HA-300E	HA-350E	LCD	●	●	●	●	●	●	●		°C
HA-300K	HA-350K	LCD	●	●	●	●	●	●	●		°C
HA-301E	HA-351E	LCD	●	●	●	●	●	●	●	1mV/°C	°C
HA-301K	HA-351K	LCD	●	●	●	●	●	●	●	1mV/°C	°C
HA-302E	HA-352E	LCD	●	●	●	●	●	●	●	10mV/°C	°C
HA-302K	HA-352K	LCD	●	●	●	●	●	●	●	10mV/°C	°C
HA-400E	HA-450E	LED		●	●						°C
HA-400K	HA-450K	LED		●	●						°C
	HA-650E	LCD		●	●						°C / °F
	HA-650K	LCD		●	●						°C / °F
	HA-750E	LCD	●	●	●	●	●				°C / °F
	HA-750K	LCD	●	●	●	●	●				°C / °F

## Specifications

Model	HA-1*0 HA-650	HA-2*0 HA-750	HA-2*1	HA-2*2	HA-3*0	HA-3*1	HA-3*2	HA-4*0
Display	LCD		LCD with Back-Light					LED
Input connector	ASP model : HA- *0* / ANP model : HA- *5*							
Channel	1ch							
Input type	Thermocouple Input : Type E, K (HA- *0* ), Type E, K, J, T, R (HA- *5* )							
Signal source resistance	MAX 500Ω							
Measurement Range	*TABLE I							
Measurement Accuracy	*TABLE II							
Reference junction compensation accuracy	±0.2°C at 25°C ±10°C [±0.4°F at 77°F ±18°F]							
Temperature Coefficient	±0.01% of full scale °C [0.01% of full scale °F]							
Environmental limit	Operation	0~40°C, 0~80%RH (Without Dew) [32~104°F, 0~80%RH (Without Dew) ]						
	Storage	-20~50°C, 0~85%RH (Without Dew) [-4~122°F, 0~85%RH (Without Dew) ]						
Battery life	300 h	300h	150 h	150 h	300 h	150 h	150 h	150 h
Power supply	4 "AA" (LR6) Alkali Batteries, Option : AC-Adaptor							
Sampling rate	App. 300 ms							
Linearizer	Digital Linearizer method (Compliant with IEC 60584-1 (1995) )							
Dimensions	70(W) × 160(H) × 35(D) mm							
Weight	App. 250 g [Include Batteries]							
Accessories	Manual, Softcase, 4 Batteries, Analog-Cable (HA- **1, HA- **2 only) , Alarm-Cable (HA-3**only)							
Analog Output	—	—	1mV/°C *TABLE III	10mV/°C *TABLE III	—	1mV/°C *TABLE III	10mV/°C *TABLE III	—
Alarm Output	—	—	—	—	○ *TABLE IV	○ *TABLE IV	○ *TABLE IV	—

**\*TABLE I (Measurement Range)**

Thermocouple Type	°C		°F	
	1°C Range	0.1°C Range	1°F Range	0.1°F Range
E	-200 ~ 800°C	-100.0 ~ 500.0°C	-328 ~ 1472°F	-148.0 ~ 932.0°F
K	-200 ~ 1370°C		-328 ~ 2498°F	
J	-200 ~ 1100°C		-328 ~ 2012°F	
T	-200 ~ 400°C	-100.0 ~ 400.0°C	-328 ~ 752°F	-148.0 ~ 752.0°F
R	0 ~ 1760°C		32 ~ 3200°F	

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

**\*TABLE II (Measurement Accuracy)**

Type	°C		°F			
E, K, J, T	0.1°C Range	0°C ~	± (0.05% of reading + 0.2°C)	0.1°F Range	32°F ~	± (0.05% of reading + 0.4°F)
		~0°C	± 0.5°C		~32°F	± 0.5°F
	1°C Range	0°C ~	± (0.1% of reading + 1°C)	1°F Range	32°F ~	± (0.1% of reading + 2°F)
		~0°C	± (0.5% of reading + 1°C)		~32°F	± (0.5% of reading + 2°F)
R	1°C Range	± (0.1% of reading + 3°C)	1°F Range	± (0.1% of reading + 6°F)		

**\*TABLE III (Analog Output)**

Environment	Accuracy
25°C ±5°C	± 0.15% of F/S + 1mV
Except 25°C ±5°C	± ((0.15% of F/S + 1mV) + (0.01% of F/S))

※Output Impedance 100Ω

**\*TABLE IV (Alarm Output)**

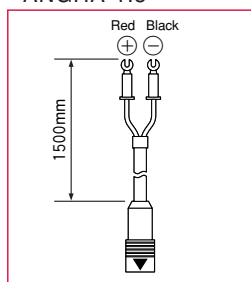
Output Pattern	Upper limit	Lower limit
More than upper limit	"L"	"H"
Between upper and lower limit	"H"	"H"
Less than lower limit	"H"	"L"

## ●Accessories

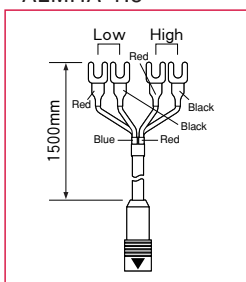
Soft case  
SCHA



Analog Output Cable  
ANGHA-1.5



Alarm Output Cable  
ALMHA-1.5



## ●Option

AC-Adaptor

A-115-200-3.8 (for AC115V)  
A-220-200-3.8 (for AC220V)



Not CE-approval

Waterproof case  
VCHA-①・②



①: Thermocouple type K or E is designated  
②: Plug type ANP or ASP is designated

# Model AP-800 series

Thermo Printer



Model AP-800 series thermometers have built-in printers for on-the-spot printing of measurement data.

## AP-800模式系列

AP-800模式系列产品是内装打印机型温度感应器。测定出的数据可以立即打印。

AP-800シリーズは、プリンタを内蔵した温度計測器です。測定データを、その場で印刷する事ができます。

AP-800K  
AP-800E



AP-800K

AP-810K  
AP-810E



AP-810K

AP-810MK  
AP-810ME



AP-810MK

AP-820K  
AP-820E



AP-820K



## AP-810KS

Please indicate S, when you order ASP plug Instruments. ASP model of AP-800 series is not correspondance to CE.

### Manual Print AP-800, AP-810, AP-810M, AP-820

```
10:35:09 456.0°C
10:35:15 425.0°C
10:35:23 423.0°C
10:35:27 420.5°C
10:35:36 419.3°C
```

Manual print-out is possible simply by pushing the PRT key with power source switch on. By pressing key, print a measured data with absolute time. (Hours: Minutes: Seconds)  
The PRT key works in any function mode.

### Interval Print AP-810, AP-810M, AP-820

```
06.01.20
AUTO 10 s
10:35:10 423.0°C
10:35:20 420.5°C
10:35:30 419.3°C
```

The SET key enables the operator to select a time mode from eight kinds of intervals (3s, 10s, 30s, 1min, 5min, 10min, 30min and 60min.).  
By pressing GO key, automatic printing starts with INT display as presets mode.

### Number Print AP-810, AP-810M, AP-820

```
06.01.20
NUMBER PRINT
###0001 423.0°C
###0002 420.5°C
###0003 419.3°C
```



Print number

The numbering print provides the sequential numbering.  
By pressing GO key, print measured data with number.

### Memory Print AP-810M

```
06.01.20
AUTO 10 s
10:35:10 423.0°C
10:35:20 420.5°C
10:35:30 419.3°C
```



Remain data

AP-810M has 100 data memory.  
After measurement, AP-810M can print data.

### 2 channels Print AP-820

```
06.01.20
AUTO 3 s
10:35:16
1ch 2ch
200.0 100.0 °C
```

```
06.01.20
AUTO 3 s
10:35:16
1ch 2ch 1-2ch
200.0 100.0 100.0 °C
```

AP-820 has 2 channels input probes.



## Kind of AP-800 series

Model No.		DISPLAY	HOLD	MANUAL PRINT	AUTOMATIC PRINT	No. PRINT	MEMORY PRINT	2ch. PRINT
AP-800K	AP-800E	LCD	●	●				
AP-810K	AP-810E	LCD	●	●	●	●		
AP-810MK	AP-810ME	LCD	●	●	●	●	●	
AP-820K	AP-820E	LCD	●	●	●	●		●

## Specifications

Model	AP-800	AP-810	AP-810M	AP-820
Display	LCD			
Input type	Thermocouple Input : Type E, K, J, T, R			
Channel	1ch		2ch	
Signal source resistance	MAX 500Ω			
Measurement Range	*TABLE I			
Measurement Accuracy	*TABLE II			
Reference junction compensation accuracy	±0.2°C at 25°C ±10°C [±0.4°F at 77°F ±18°F]			
Temperature Coefficient	±0.01% of full scale °C [0.01% of full scale °F]			
Environmental Limit	Operation	0~40°C, 0~80%RH (Without Dew) [32~104°F, 0~80%RH (Without Dew) ]		
	Storage	-20~50°C, 0~85%RH (Without Dew) [-4~122°F, 0~85%RH (Without Dew) ]		
Sampling rate	*TABLE III			
Battery life	*TABLE III			
Power supply	NiMH (6HR-AU)			
Linearizer	Digital Linearizer method (Compliant with IEC 60584-1 (1995) )			
Print out	Character size 2mm, Paper width 58mm (1400 lines/roll) , Thermal line dot printing			
Memory	-		100 data	-
Dimensions	App. 88 (W) × 207 (H) × 48 (D) mm			
Weight	App. 550 g			
Accessories	Manual, Softcase, Charger, 5 rolls paper			

**\*TABLE I (Measurement Range)**

Thermocouple Type	°C		°F	
	1°C Range	0.1°C Range	1°F Range	0.1°F Range
E	-200 ~ 800°C	-100.0 ~ 500.0°C	-328 ~ 1472°F	-148.0 ~ 932.0°F
K	-200 ~ 1200°C		-328 ~ 2192°F	
J	-200 ~ 1100°C		-328 ~ 2012°F	
T	-200 ~ 400°C	-100.0 ~ 400.0°C	-328 ~ 752°F	-148.0 ~ 752.0°F
R	0 ~ 1760°C		32 ~ 3200°F	

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

**\*TABLE II (Measurement Accuracy)**

Type	°C			°F		
E, K, J, T	0.1°C Range	0°C ~	± (0.05% of reading + 0.2°C)	0.1°F Range	32°F ~	± (0.05% of reading + 0.4°F)
		~0°C	± 0.5°C		~32°F	± 0.5°F
	1°C Range	500°C ~	± (0.1% of reading + 1°C)	1°F Range	932°F ~	± (0.1% of reading + 2°F)
		~-100°C	± (0.5% of reading + 1°C)		~-148°F	± (0.5% of reading + 2°F)
R	1°C Range	± (0.1% of reading + 3°C)		1°F Range	± (0.1% of reading + 6°F)	

**\*TABLE III (Sampling rate and Battery life)**

Interval	Sampling rate	Battery life
No Printing mode	2times / second	App. 40hours
3 seconds	2times / second	App. 25hours
10 seconds	1time / 5seconds	App. 45hours
30 seconds	1time / 5seconds	App. 80hours

Interval	Sampling rate	Battery life
1 minute	1time / 10seconds	App. 100hours
5 minutes	1time / minute	App. 110hours
10 minutes	1time / minute	App. 120hours
30 minutes	1time / minute	App. 120hours
60 minutes	1time / minute	App. 120hours

## ●Accessories

### Soft case



### Charger

NB-115-3P (for AC115V)  
NB-230-3P (for AC230V)



Not CE-approval

### Print Paper



five pieces set

# 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。

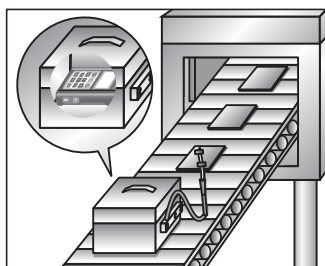
AM-8000シリーズは、ハンディタイプの温度データロガーです。計測データをメモリ専用ソフトにてパソコンへ転送することで、データ処理が可能です。

6ch

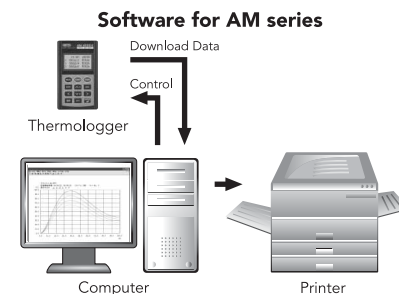
12ch



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.

## 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 : 9kg

## 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 : 8kg

\*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°C / 1°C (fixed)				Temperature : 0.1°C / 1°C (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 / App. 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°C / 1°C (fixed)				Temperature : 0.1°C / 1°C (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 / App. 480g (including dry batteries)							

## Common specifications

Input connector	ANP connector (Miniature Plug)
Reference junction compensation accuracy	±0.3°C (at 25°C ±10°C)
Temperature coefficient	± (0.01% / °C) of measurement range except 25°C ±10°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
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
Linearizer	Digital Linearizer method (Compliant with IEC 60584-1 (1995))
Interface	USB 1.1 MINI-B or RS-232C
Display	Graphic liquid crystal display, 128×64 dots (55×27mm)
Operational environment	0~40°C, 20~80%RH (Without Dew)
Storage environment	-10~50°C, 10~90%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 ~ 800°C	-100.0 ~ 500.0°C
K	-200 ~ 1370°C	
J	-200 ~ 1100°C	
T	-200 ~ 400°C	
R	0 ~ 1760°C	-

### \*TABLE II (Measurement Accuracy)

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

### \*TABLE III (Analog Output)

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

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

## ●Accessories

Soft case  
SC-6 (for 6ch model)  
SC-12 (for 12ch model)

Communication Cable  
AM-USB (for USB)

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



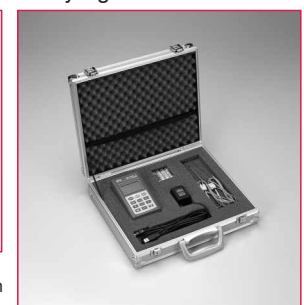
for AM-80\*\*

for AM-81\*\*

## ●Option

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

Carrying Case



Not CE-approval  
Please contact us for information on  
CE-approval products.

# Model ACS II series

## Temperature Calibration System

Model ACSII series products are temperature calibration systems for surface temperature and internal temperature measuring devices. Temperatures can be set across a wide range, from room temperature to 500°C. These calibration systems are designed for calibration or to check temperature measuring probes.

### ACSII 模式系列

ACSII 模式系列产品是表面温度、内部温度的标准校正器。从室温到500°C之间的温度可以自由设定,可用于温度感应器的校正、检测等用途。

ACS II シリーズは、表面温度、内部温度の基準校正器です。室温から500°Cまで、自由に温度を設定できます。温度センサの校正、チェックなどにご使用ください。

### ACSII-1000

For Surface Temperature Max. 300°C



※Please specify a power supply voltage when ordering (choose from 100 VAC, 115 VAC, or 230 VAC).

### ACSII-2000

For Surface Temperature Max. 500°C



## Specifications

### OVERALL ACCURACY

Model		ACSII-1000	ACSII-2000	ACSII-3000	ACSII-4000	
Calibration Object		Surface Temperature	Surface Temperature	Internal Temperature	Surface Temperature	Internal Temperature
Range	Rt~100°C	+0.5 / -0.7 °C	+0.5 / -0.7 °C	±0.26°C	+0.4 / -0.6 °C	±0.26°C
	100~200°C	+0.5 / -1.1 °C	+0.5 / -1.1 °C	±0.32°C	+0.3 / -0.9 °C	±0.32°C
	200~300°C	+0.5 / -1.5 °C	+0.5 / -1.5 °C	±0.37°C	+0.1 / -1.1 °C	±0.37°C
	300~400°C	—	+0.4 / -2.0 °C	±0.43°C	+0.2 / -1.5 °C	±0.43°C
	400~500°C	—	-0.1 / -2.9 °C	±0.48°C	-0.9 / -2.2 °C	±0.48°C

### CONTROL UNIT

Model		ACSII-1000	ACSII-2000	ACSII-3000	ACSII-4000
Surface Range		Rt~300°C	Rt~500°C	—	Rt~500°C
Internal Range		—	—	Rt~500°C	Rt~500°C
Control Principle		PID Auto-Tuning Control			
Control	Input	Pt 100 Ω, φ3.2, Class A			
	Accuracy	± (0.2% of reading) °C			
	Display	8mm high LED display			
Reference Sensor	Input	—		Pt 100 Ω, φ4.8, Class A	
	Accuracy	—		± (0.05% of reading +0.05) °C	
	Display	—		12.5mm high LED display	
Power Consumption		App. 160W	App. 700W	App. 1600W	App. 1600W
Dimensions W×H×D (mm)		320×177×350			430×177×350
Weight		App. 4.5kg			App. 5.0kg

### CALIBRATION UNIT

Model	ACSII-1000	ACSII-2000	ACSII-3000	ACSII-4000
Testing Surface	φ78mm	φ100mm	—	□150mm
Test Point	—	—	8 holes based on specified dimension	
Temp. Distribution	±0.1°C			
Heater	150W	600W	1500W	1500W
Dimensions W×H×D (mm)	260×130×260	390×230×360	450×405×400	
Weight	App. 7kg	App. 20kg	App. 70kg	
Overheating prevention mechanism	Bimetal breaker			
Heating time	Rt→150°C 20min. Rt→300°C 40min.	Rt→250°C 20min. Rt→500°C 50min.	Rt→250°C 60min. Rt→500°C 150min.	
Cooling time	300→150°C 20min. 150→50°C 40min.	500→250°C 30min. 250→50°C 70min.	500→250°C 220min. 250→100°C 430min.	

# Model R-100 series

Infrared Thermometer

# Model AR-6500 series

Contact & Non-Contact Thermometer



Model R-100 series and AR-6500 series infrared thermometers can measure temperatures without contacting the measurement target. Model AR-6500 series can also measure temperatures using a contact-type probe.

R-100模式系列 / AR-6500模式系列

R-100模式系列产品以及AR-6500模式系列产品都是非接触式测试温度的放射温度计。此外，AR-6500模式系列产品同时也可以进行接触式温度测试。

R-100シリーズおよびAR-6500シリーズは、非接触で温度測定が可能な放射温度計です。

またAR-6500シリーズは、接触式温度センサでの温度測定も可能です。



**R-100 Series**  
Handy type

## Features

- Broad measurement range
- Small measurement area
- Wide range of emissivity settings
- Automatic emissivity setting using contact-type probe (For AR-6500 series only)

## Specifications

Model	AR-6500	AR-6501	AR-6500-H	AR-6501-H	R-100	R-150	R-160
CE Approval	CE	CE	CE	CE	—	—	—
Measurement Range	-50~500°C		0~1200°C		-50~500		0~1200°C
Resolution	0.1°C		1°C		1°C	0.1°C	1°C
Laser aiming	●	●	●	●	—	●	●
Contact Mode	●	●	●	●	—	—	—
Measurement Accuracy	*TABLE I		*TABLE II		*TABLE I		*TABLE II
Reference junction compensation accuracy	±0.2°C at 25±10°C						
Temperature coefficient	±0.01% of full scale °C						
Power supply	Ni-Cd rechargeable battery (4AA)						
Battery life	30 hours ~ (10 hours when laser is used continuously)						
Environmental limit	Operation 0~40°C, 0~80%RH (Without Dew)						
	Storage -20~50°C, 0~85%RH (Without Dew)						
Analog output (*Table III)	—	1mV/°C	—	1mV/°C	—	—	—
Weight	App. 400g						
Accessories	Manual, Soft case, Lens cap, Charger						
	—	Output cable	—	Output cable	—	—	—

\*TABLE I

AR-6500, AR-6501, R-100, R-150		Field of view
		unit : mm
Non-contact	250~500°C	± (0.8% of reading + 1 digit)
	0~250°C	± (2°C + 1 digit)
	-50~ 0°C	± (3°C + 1 digit)
Contact	-50~500°C	± (0.05% of reading + 0.1°C) ± 1 digit

\*TABLE II

AR-6500-H, AR-6501-H, R-160		Field of view
		unit : mm
Non-contact	600~1200°C	± (0.5% of reading + 1 digit)
	250~ 600°C	± (3°C + 1 digit)
	0~ 250°C	± (4°C + 1 digit)
Contact	0~1200°C	± (0.1% of reading + 1 digit)

\*TABLE III

Output Rate	1mV / °C
Accuracy	± (0.15% of F/S+1mV) : at 25±5°C ± (0.15% of F/S+1mV) ± 0.01% of F/S : except 25°C±5°C

## Non-contact mode

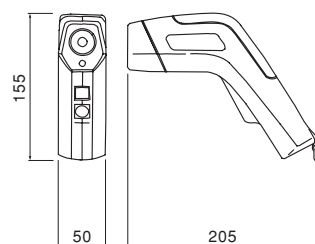
Detector	Thermopile
Spectral response	8~14 μm
Repeatability	± (0.4% of reading + 1 digit)
Response time	500ms (95%)
A-constant adjustment	0.10~2.00 (0.01 step)
Laser aiming	L2 models meet ICE Class2

## Contact mode

Input	Thermocouple Type : K
Sampling time	500ms

## Dimensions

Handy type (AR-6500 series)



## Accessories

### Charger

B-115-5.5 (for AC115V)  
B-230-5.5 (for AC230V)



Not CE-approval