NEW
新产品

Handheld Thermometer
手持式温度计

HR series
系列

CE

Handy type thermometer HR series featuring high accuracy, reliability and ease of use.
Combined with Anritsu Meter's wide variety of temperature probes, it supports a variety of applications.

追求高精准度，可靠性，操作简单的HR系列。
可以和安立计器的多种多样的温度传感器配合使用于各种领域。

Detail of product information is available here

扫码了解更多产品信息

ISO 9001 JQA-2721
ISO 14001 JQA-EM6215

ANRITSU METER CO.,LTD.

Features 特点

Low power consumption.
Capable of 900 hours of continuous operation
(HR-12∗0)
可连续使用900小时 (HR-12∗0)

Waterproof specifications：Equivalent to IPX5
(HR-11∗0, HR-12∗0, HR-14∗0, HR-1650, HR-1750)
IPX5防水功能 (HR-11∗0, HR-12∗0, HR-14∗0, HR-1650, HR-1750)

Made in Japan
高品质的日本制造

Large easy-to-read LCD display
大型液晶显示屏

Various probes available (sold separately)
可和多种多样的温度传感器搭配

※ image picture of temperature measurement
测量温度图片

HR series lineup 系列产品

Basic model
基础

ANP model
HR-1150K
HR-1150E

ASP model
HR-1100K
HR-1100E

Standard model
标准

ANP model
HR-1250K
HR-1250E

ASP model
HR-1200K
HR-1200E

High function model
高功能

ANP model
HR-1350K
HR-1350E

ASP model
HR-1300K
HR-1300E

LED display model
LED显示屏

ANP model
HR-1450K
HR-1450E

ASP model
HR-1400K
HR-1400E

Memory model
记录功能

ANP model
HR-1550K
HR-1550E

ASP model
HR-1500K
HR-1500E

ANP model	ASP model	DISPLAY	BACK LIGHT	WATER PROOF	AUTO OFF	HOLD	P/V HOLD	RESO	CAL	ALARM	ANALOG	MEMORY	℃ / ℉
HR-1150K HR-1150E	HR-1100K HR-1100E	LCD		●	●	●							℃
HR-1250K HR-1250E	HR-1200K HR-1200E	LCD	●	●	●	●	●	●					℃
HR-1350K HR-1350E	HR-1300K HR-1300E	LCD	●		●	●	●	●	●	●			℃
HR-1351K HR-1351E	HR-1301K HR-1301E	LCD	●		●	●	●	●	●	●	●		℃
HR-1450K HR-1450E	HR-1400K HR-1400E	LED		●	●	●							℃
HR-1550K HR-1550E	HR-1500K HR-1500E	LCD	●		●	●	●	●				●	℃
HR-1650K HR-1650E		LCD		●	●	●							℃ / ℉
HR-1750K HR-1750E		LCD	●	●	●	●	●	●					℃ / ℉

Functions 功能

Waterproof specifications 防水功能

Protect from water
防水

Waterproof specifications : Equivalent to IPX5.
IPX5防水功能。 安全的防水设计。

Display 显屏

Large display and easy to read
大显示屏，易于查看

Large easy-to-read LCD display.
便于确认的大型显示屏。

Auto power-off 自动关闭电源

Prevent forgetting to turn off the power
防止忘记关闭电源

The thermometer will turn the power off automatically after 5minutes.
5分钟以上不使用按钮，主机将自动关闭。

Hold 固定测量数据

Fixed display of indicated value
固定显示值

The displayed value can be fixed by the【HOLD】key.
按【HOLD】键，可固定显示所测量数据。

P/V hold P/V值固定显示

Prevent oversight of measurements during work
不错过测量值

The peak (Max.) value and the valley (Min.) value can be displayed by the【P/V HOLD】key on the sub-display.
按【P/V HOLD】键显示测量中的最大值和最小值。

Resolution change 切换分辨率

Also displays small changes in values
显示测量值的微小变化

Press the【RESO】key, the resolution of the indicated value can be switched to 1℃ or 0.1℃.
可切换显示值的分辨率。

Calibration 校准

Correct the displayed value
补正指示值

The displayed value can be adjusted by the【CAL】key.
可设定测量标准值。

Alarm output 报警输出

Notified when the measurement value is out of the set temp. range
测量温度超出设定范围外时，可发出警报

The thermometer gives an alarm when readings go beyond the high or low limits.
测量温度超出设置范围时，可显示·蜂鸣·信号输出进行警告。

Analog output 模拟输出

Converts the value to voltage and outputs it to another device
可将测量数值转换成电压值输出

Uses an insulation system.
Analog output ON (output rate 1mV/℃ or 10mV/℃) · Analog output OFF can be switched by key operation.

1mV/℃ : Outputs 1mV for 1℃ in conjunction with the indicated value.
10mV/℃ : Outputs 1mV for 0.1℃ in conjunction with the indicated value.

采用绝缘方法。
可通过按键操作切换模拟输出ON(输出率 1mV/℃ 或 10mV/℃) · 模拟输出 OFF。

1mV/℃ ：结合指示值1mV 为 1℃进行电压输出。
10mV/℃：结合指示值1mV 为 0.1℃进行电压输出。

℃ / ℉ Change 切换℃ / ℉

Press the【℃ / ℉】key to change the temperature unit of the displayed temperature.
按【℃ / ℉】键切换℃与℉。

Memory function 记录功能

Record measurement results and transfer data to PC

记录测量数据・数据可导入电脑

- Stores readings at user-selected time intervals. User specified time interval and the remaining amount of memory are displayed on the sub-display.
- The playback function allows you to check data stored in memory.
- You can graph and form the recorded data on your PC by using attached software. It is also possible to convert the recorded data to CSV format.

・按设置间隔记录数据。同时显示记录间隔和可记录剩余数据量。
・可回放显示记录的数据。
・使用附属软件，通过USB数据线将数据传到电脑，并且可以转换成CSV文档。

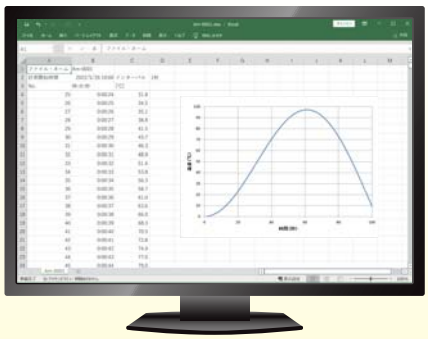
Data stored in memory can be transmitted to a personal computer through a USB interface.

通过USB数据线传送数据到电脑。

HR-15∗0K
HR-15∗0E

USB interface

Download data



● Operating environment of dedicated data analysis software AMS-350

Supported OS Windows® 8.1, Windows® 10 Under USB environment
System type 32bit / 64bit

※ Operation is not guaranteed for all PCs with the above operating environment.
※ Available only to users with system administrator privileges Administrator.
※ Windows® is registered trademarks or trademarks of Microsoft Corporation in the United States, Japan and other countries.
※ Windows® 8.1 and Windows® 10 are product names of Microsoft Corporation in the United States.

Supplied accessories and Optional accessories 附件和选件

Supplied accessories

Test report 试验成绩书

Soft case 主机套

SCHR2

Thermometer not included.
不包含主机。

Hand strap 手带

Thermometer not included.
不包含主机。

Optional accessories

AC-Adaptor AC电源

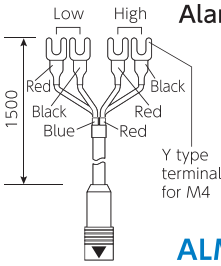
FOR
HR-13∗0
HR-13∗1
HR-15∗0

AD-115-500-HR-R (for 115V AC)
AD-220-500-HR-R (for 220V AC)

Not CE-approval.
不对应CE。

Supplied accessories

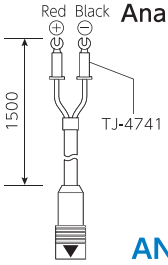
Alarm output cable 报警输出线



FOR
HR-13∗0
HR-13∗1

ALMHA-1.5

Analog output cable 模拟输出线



FOR
HR-13∗1

ANGHA-1.5

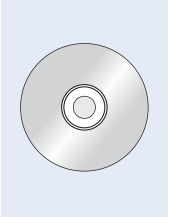
An alarm output cable and an analog output cable cannot be used simultaneously.
不能同时使用报警输出线和模拟输出线。

Communication cable 通信用USB线

FOR
HR-15∗0

AM-USB2

Software for HR-15∗0 (CD-ROM) 软件



FOR
HR-15∗0

AMS-350

Connector type 连接传感器

2 types of connectors available

有2种插口可供选择

ANP : Miniature size connector

ASP : Standard size connector

Typical temperature probes 温度传感器

Supports various applications with a wide variety of temperature probes

搭配多种传感器对应各种用途

For measuring surface temperature of molds, etc.

测量金属模具表面温度

AX-231K-00-1-TC1-ANP
AX-231E-00-1-TC1-ANP

Temp.range 使用温度范围	Tolerance 精准度	Response time 响应速度
−50～500℃	±2.5℃	1.5s

Suitable for temperature measurement of small parts

测量电子基板等微小零部件的表面温度

CS-13K-010-1-TC1-ANP
CS-13E-010-1-TC1-ANP

Temp.range 使用温度范围	Tolerance 精准度	Response time 响应速度
−50～400℃	±2.5℃	2s

Suitable for temperature measurement during moving rotation

测量塑封滚轮等表面温度

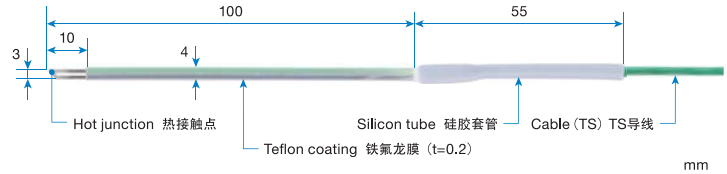
UX-211K-01-D0-1-TC1-ANP
UX-211E-01-D0-1-TC1-ANP

Temp.range 使用温度范围	Tolerance 精准度	Response time 响应速度
−50～250℃	±2.5℃	3.5s

Temperature can be measured by pasting or sandwiching

可贴在被测物表面•或夹于被测物中间进行测量

ST-11K-010-TS1-ANP
ST-11E-010-TS1-ANP



Temp.range 使用温度范围	Tolerance 精准度	Response time 响应速度
−50～210℃	±2.5℃	2s

Specifications

Model			HR-1100 HR-1150 HR-1650	HR-1200 HR-1250 HR-1750	HR-1300 HR-1350	HR-1301 HR-1351	HR-1400 HR-1450	HR-1500 HR-1550
Display			LCD				LED	LCD
Waterproof specifications / Equivalent to IPX5			○	○	—	—	○	—
Input connector			ASP model : HR-1∗0∗ / ANP model : HR-1∗5∗					
Input type			Thermocouple Input : Type E, K (Not switchable)*1					
Channel			1ch					
Signal source resistance			MAX.1kΩ					
Measurement range	1℃	E	−200～800℃ [−328～1472℉]					
		K	−200～1370℃ [−328～2498℉]					
	0.1℃	E	−104.9～504.9℃ [−156.9～940.9℉] (Switches automatically to 1℃ resolution range when measured temperatures fall outside the 0.1℃ resolution range.)					
		K	−104.9～504.9℃ [−156.9～940.9℉] (Switches automatically to 1℃ resolution range when measured temperatures fall outside the 0.1℃ resolution range.)					
Measurement Accuracy	1℃	0℃～	±(0.1% of reading +1℃) [±(0.1% of reading +2℉]					
		～0℃	±(0.5% of reading +1℃) [±(0.5% of reading +2℉]					
	0.1℃	0.0℃～	±(0.05% of reading +0.2℃) [±(0.05% of reading +0.4℉]					
		～0.0℃	±(0.15% of reading +0.2℃) [±(0.15% of reading +0.4℉]					
Reference junction compensation accuracy			±0.2℃ at 25℃±10℃ [±0.4℉ at 77℉±18℉]					
Temperature Coefficient (Only when the temp. exceeds 25℃±10℃)			HR-1∗0∗ : ±0.02×Δt℃ / HR-1∗5∗ : ±0.03×Δt℃ (Add the value obtained by multiplying the excess temp. Δt[℃] by a coefficient to the total accuracy. For HR-1∗0∗ e.g. ±0.3℃ is added at room temp. of 0℃ or 50℃)					
Operation Environment			0～50℃, 0～80%RH (Non condensing) [32～122℉, 0～80%RH (Non condensing)]					
Storage Environment			−20～50℃, 0～85%RH (Non condensing) [−4～122℉, 0～85%RH (Non condensing)]					
Battery life			approx. 900h	approx. 900h	approx. 600h	approx. 20h*2	approx. 300h	approx. 550h
Power supply	Dry battery		4 AA Alkaline Batteries					
	AC power (Option)		—	—	available		—	available
Sampling rate			approx. 200ms					
Linearlizer			Digital Linearizer method (Compliant with JIS C1602-2015)					
Dimensions (mm)			approx. 82 (W) × 166 (H) × 36 (D) [Protruded parts excluded]					
Weight			approx. 350g [Include Batteries]					
Supplied accessories			Manual, Test report, Soft case, Hand strap, 4 AA Alkaline batteries					
Optional accessories			—	—	Alarm output Cable		—	Communication Cable, software (AMS-350)
					—	Analog output Cable		
Alarm Output			—	—	○ TABLE Ⅰ	○ TABLE Ⅰ	—	—
Analog Output			—	—	—	○ TABLE Ⅱ	—	—
Memory function			—	—	—	—	—	○ TABLE Ⅲ
Conformity standards (CE)			EMC : EN61326-1 : 2013, EN 61326-2-1 : 2013 classA Table2 (Industrial) RoHS : IEC EN 63000 : 2018					

*1 Type J, T, R are also available. Please contact us for more information. *2 Approx. 400 hours when the analog output is switched always off.

TABLE Ⅰ Alarm Output : HR-13∗0, HR-13∗1

Output Pattern	Upper Limit	Lower Limit
More than upper limit	Close	Open
Between upper and lower limit	Open	Open
Less than lower limit	Open	Close
Alarm output Cable	ANGHA-1.5 (accessory)	

※ The alarm output uses a photo MOS relay. ON resistance (internal protection resistance 400Ω, photo MOS relay ON resistance 50Ω) Drive voltage MAX.25V

TABLE Ⅲ Memory function : HR-1500, HR-1550

Time interval	1second, 5seconds, 10seconds, 30seconds, 1 minute, 5 minutes, 10 minutes, 30 minutes, 60minutes and manual memory
Memory capacity	19999data

TABLE Ⅱ Analog Output : HR-1301, HR-1351

Rate	1mV/℃ (1℃ resolution)	10mV/℃ (0.1℃ resolution)
Range	The entire measurement range with 1℃ resolution	The entire measurement range with 0.1℃ resolution
Analog output conversion accuracy (under 25℃±10℃)	Equivalent to the value obtained by adding ±1℃ (1mV) to the measurement accuracy	Equivalent to the value obtained by adding ±0.1℃ (1mV) to the measurement accuracy
Temperature coefficient*3	± (0.1mV/℃×Δt℃) e.g. ±1.5mV (2℃) is added at room temp. of 0℃ or 50℃)	± (0.1mV/℃×Δt℃) e.g. ±1.5mV (0.2℃) is added at room temp. of 0℃ or 50℃)
When the probe is disconnected	Approx. −2.3V	
Measurement range + over	Approx. 5.1V	
Measurement range − over	Approx. −2.2V	
Insulation resistance	100MΩ/DC500V (between input and analog output)	
Withstand voltage	300Vp-p (between input and analog output)	
Cable	ANGHA-1.5 (accessory)	

*3 When the temperature exceeds 25℃±10℃, multiply the excess temperature Δt℃ by a coefficient and add it to the analog output conversion accuracy.
※ Regarding analog output: The displayed value is D/A converted and output. The update timing is about 200ms, and the output resolution is in 1 mV units. When not using the analog output, turn off the analog output.

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