



Rometec s.r.l.

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P. IVA 04120621000 - CCIAA RM 736916

Reg. Soc. Tribunale RM 9229/91 - Cap. soc. 46'482,00 €



HS218 RTD Calibrator



- Working environment temperature:-18°C~55°C
- Store environment temperature:(-20 – 60)°C
- Relative humidity :0~ 90RH No condensation
- Weight:0.35Kg
- Size:185mm×93mm×47mm
- Power supply: 6 AAA-model rechargeable batteries or power adapter
- communication mode:RS232

For the temperature calibration professional that wants a highly accurate, easy-to-use, single function RTD temperature. It is a kind of calibrating RTD temperature transmitter instrument. It can measure and simulate various type RTD. It can also simulate and test resistance. it's the ideal test tool.

Features

- Accuracy:0.02% or 0.05%
- Measure output temperature of thermal resistance
- May simulate output of thermal resistance
- Automatic identification of three-wire or four-wire connection mode
- Perfect performance on waterproof protection: IP67 grade
- In case of connecting 220V with automatic over voltage protection function.
- With manual stepping, automatic stepping and 0 ~ 100% output of phase step and ramp function
- LED with white backlight

Source and Measure Functions

Function	Measure	Source
DC V	0~30V	Not available
Resistance	0~3200Ω	0~3200Ω
RTD	Pt100, Pt1000, Cu50, Cu100	Pt100, Pt1000, Cu50, Cu100
Others	Stepping output, ramp, phase step output, user-defined range	

Specifications

Specifications are based on a one year calibration cycle and apply from +18°C to +28 °C unless stated otherwise. All specifications assume a 10 minute warmup period.

1 DC Voltage Measurement

Range	Maximum measurement range	Resolution	Accuracy (% of reading + Count)	
			HS218B (0.05%)	HS218A (0.02%)
30V	0V~31V	0.001V	0.05+2	0.02+2

-10°C~18°C,+28°C~55°C temperature coefficient,±0.005%FS/°C.
Input resistance: >1MΩ.

2 Resistance Measurement

Range	Maximum measurement range	Resolution	Accuracy (Ω)			
			HS218B (0.05%)		HS218A (0.02%)	
			2-wire, 3-wire	4-wire	2-wire, 3-wire	4-wire
400Ω	0~440Ω	0.01Ω	0.25	0.15	0.15	0.10
3200Ω	420Ω~3600Ω	0.1Ω	1.5	1.0	1.0	0.5

-10°C~18°C,+28°C~55°C temperature coefficient,±0.005%FS/°C.
Exciting current during measurement:
400Ω:1.0mA±10%;
3200Ω:0.2mA±10%;
Two-wire: Conductor resistance is excluded from errors.
Three-wire: Matching test line should be used. The total resistance of conductor should not be larger than 25Ω.

3 Resistance Output

Range	Maximum output range	Resolution	External exciting current	Accuracy (Ω)	
				HS218B (0.05%)	HS218A (0.02%)
400Ω	0~440Ω	0.01Ω	0.4mA~4.0mA	0.25	0.15
3200Ω	400~3600Ω	0.1Ω	0.1mA~0.5mA	1.0	0.50

-10°C~18°C,+28°C~55°C temperature coefficient,±0.005%FS/°C.

4 RTD

Graduation	Range	Resolution	Accuracy (°C)					
			HS218B (0.05%)			HS218A (0.02%)		
			2-wire 3-wire	4-wire	Output	2-wire 3-wire	4-wire	Output
Pt100	-200°C~850°C	0.1°C	0.7	0.4	0.7	0.4	0.3	0.3
Pt1000	-200°C~650°C		0.4	0.3	0.3	0.3	0.15	0.15
Cu50	-50°C~150°C		1.2	0.8	0.8	0.8	0.5	0.5
Cu100	-50°C~150°C		0.7	0.4	0.4	0.4	0.25	0.25

As for exciting current during measurement, please refer to resistance measurement function.
As for allowable external exciting current during output, please refer to resistance output function.
2-wire: Does not include lead resistance.
3-wire: Assumes matched leads with a total resistance not exceeding 25Ω.