HIGH-PRECISION DIGITAL MEASUREMENT

The highest output precision is 0.05%, and the output display is 5 digits



CE

Professional certification

High-precision measurement

01 Input measurement function

Used within one year after calibration, 23℃±5℃, 20-70% RH, accuracy = ± (% set value + reading)

- Uncertainty includes standard uncertainty, hysteresis, nonlinearity, repeatability, and typical long-term stability over the period mentioned (K = 2).
- Display refresh rate: 2-3 times / second.
- Maximum applied voltage at input terminal: 60 Vpk.
- Input common-mode rejection: 50Hz /60 Hz > 80 db; Input serial-mode rejection: 50Hz /60 Hz > 40 db
- Temperature coefficient: 0.1 × basic accuracy / ℃ (temperature range <18℃ or >28℃)

Measurement	Range	Measuring range	Resolution	Accuracy
DCV	100mV	-110.000mV~110.000mV	0.01mV	0.05%+0.03mV
	1V	-1.1000V~1.1000V	0.0001V	0.05%+0.3mV
	30V	-30.000V~30.000V	0.001V	0.02%+2mV
OMH	500Ω	0~550.00Ω	0.01Ω	0.05%+0.2Ω
	5KΩ	0~5.5000KΩ	0.0001KΩ	0.05%+2Ω
TC	R	0°C～1767°C	1°C	0°C~500°C : 2.5°C
	S	0°C～1767°C		500°C~1767°C : 2°
	K	-100.0°C～1372.0°C	0.1°C	-100.0°C~0°C : 1.2°C 0.0°C~1372°C : 0.8°C
	E	-50.0°C～1000.0°C		-50.0°C~0°C : 0.9°C 0.0°C~1000.0°C : 1.5°C
	J	-60.0°C～1200.0°C		-60.0°C~0°C : 1.0°C 0.0°C~1200.0°C : 0.7°C
	T	-100.0°C～400.0°C		-100.0°C~0°C : 1.0°C 0.0°C~400.0°C : 0.7°C
	N	-200.0°C～1300.0°C		-200.0°C~0°C : 1.5°C 0.0°C~1300.0°C : 0.9°C
	B	600°C～1820°C	1°C	600.0°C~800°C : 2.2°C 800°C~1820.0°C :1.4°C
	A	0°C～2500°C		0.0°C~1600°C : 2.0°C 1600°C~2500.0°C :2.4°C
	C	0°C～2310°C		0.0°C~1600°C :2.0°C 1600°C~2310.0°C :2.4°C
	D	0°C～2310°C		0.0°C~270°C : 2.4°C 270°C~2310.0°C : 2.2°C
RTD (3W)	Pt100(385)	-200°C～800°C	0.1°C	-200.0°C~0°C : 0.5°C 0°C~800.0°C : 0.8°C
	Pt200(385)	-200°C～630°C		-200.0°C~100°C : 0.8°C 100°C~630.0°C : 1.0°C
	Pt500(385)	-200°C～630°C		-200.0°C~100°C : 0.4°C 100°C~630.0°C : 0.7°C
	Pt1000(385)	-200°C～630°C		-200.0°C~100°C : 0.3°C 100°C~630.0°C : 0.7°C
	Cu50	-50°C～150°C		-50.0°C~150°C : 0.7°
On/off detection	500Ω	≤50Ω sounding	0.01Ω	

02 Analog output function

Used within one year after calibration, 23℃±5℃, 20-70% RH, accuracy = ± (% set value + reading)

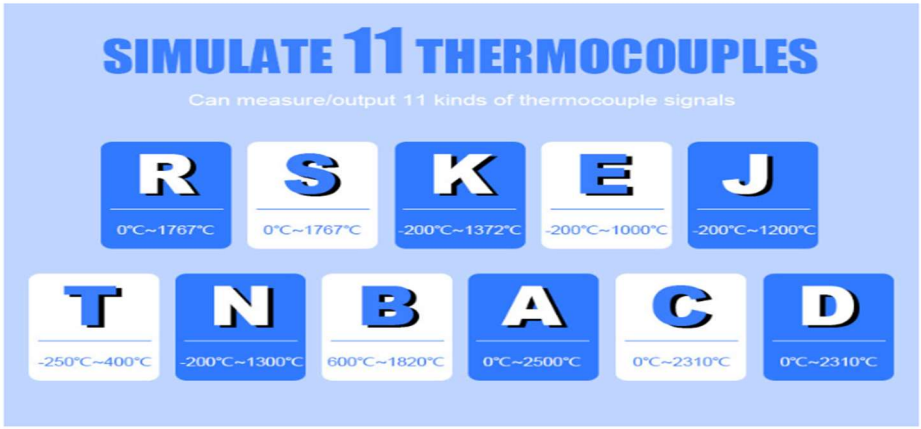
- Uncertainty includes standard uncertainty, hysteresis, nonlinearity, repeatability, and typical long-term stability over the period mentioned (K = 2).
- Maximum applied voltage at output terminal: approximately 30Vpk; Maximum applied current at output terminal: approximately 25mA
- Output terminal protection: 100mA fuse.
- Temperature coefficient:0.1×basic accuracy/℃(temperature range < 18℃ or > 28℃)

Output	Range	Output range	Resolution	Accuracy
DCV	100mV	-10.000mV~110.00mV	0.01mV	0.05%+0.03mV
	1V	-0.1000V~1.1000V	0.0001V	0.05%+0.3mV
OMH	400Ω	0Ω~400.0Ω	0.1Ω	0.05%+0.2Ω
	4KΩ	0~4.000KΩ	1Ω	0.05%+2Ω
TC	R	0℃～1767℃	1℃	0～100℃：1.5℃ 10～1767℃：1.2℃
	S	0℃～1767℃		
	K	-200.0℃～1372.0℃	0.1℃	-200.0～400℃ ：0.5℃ 400～1372.0℃ ：0.7℃
	E	-200.0℃～1000.0℃		-200.0℃～-100℃ ：0.6℃ -100.0～1000.0℃ ：0.4℃
	J	-200.0℃～1200.0℃		-200.0～-100℃ ：0.6℃ -100.0～1200.0℃ ：0.7℃
	T	-250.0℃～400.0℃		-250.0～400.0℃ ：0.6℃
	N	-200.0℃～1300.0℃		-200.0～900℃ ：0.7℃ 900.0～1300.0℃ ：0.8℃
	B	600℃～1820℃	1℃	600～800℃ ：1.5℃ 800～1820℃ ：1.1℃
	A	0℃～2500℃	1℃	0.0C～1600C :2.0℃ 1600C～2500.0C :2.4℃
	C	0℃～2310℃	1℃	0.0C～1600.0C :2.0℃ 1600.0C～2310.0C :2.2℃
	D	0℃～2310℃	1℃	0.0～270.0℃: 2.4℃ 270.0～2310.0℃: 2.2℃
RTD	Pt100(385)	-200.0℃～800.0℃	0.1℃	-200.0～400.0℃: 0.5℃ 400.0～800.0℃: 0.8℃
	Pt200(385)	-200.0℃～630.0℃		-200.0～300.0℃: 0.8℃ 300.0～630.0℃: 1.0℃
	Pt500(385)	-200.0℃～630.0℃		-200.0～300.0℃: 0.5℃ 300.0～630.0℃: 0.7℃
	Pt1000(385)	-200.0℃～630.0℃		-200.0～300.0℃: 0.5℃ 300.0～630.0℃: 0.7℃
	Cu50	-50.0℃～150.0℃		-50.0～150.0℃ ：0.6℃

SIMULATE 5 KINDS OF THERMAL RESISTANCE

Can measure/output 5 RTD signals





SCHEMATIC DIAGRAM OF WIRE CONNECTION

l Basic functions
DC voltage DCV, resistance OHM, thermocouple TC, thermal resistance RTD, on/off
l The maximum measurement accuracy is 0.05% and the measurement display is 5 digits.
l Measurement rate: 2-3 times/sec.
l 2W / 3W / 4W measurements are available for OHM and RTD.
l The measured temperature value and the corresponding temperature signal are displayed on the same screen.
2. Analog output characteristics

l Basic functions
DC voltage DCV, resistance OHM, thermocouple TC, thermal resistance RTD
l The maximum output accuracy is 0.05% and the output display is 5 digits.
l Output settings can be manually increased or decreased by position.
l H/L settings are available for OHM excitation current.
l The output temperature value and the corresponding temperature signal are displayed on the same screen.
3. It has a built-in high-precision temperature sensor for high-precision cold-end compensation.
Thermocouple cold-end compensation can be set, including manual compensation, automatic compensation, compensation access disconnection, etc.
4. It has maintenance setup functions, including
Auto power-off, backlight, flashlight, buzzer, etc.
5. Others
l The segment code is displayed on an LCD with a white backlight.
l It has a LED flashlight for lighting.
l It is powered by 3 AA battery cells. The battery compartment door is convenient for battery replacement. Low-battery detection is available.
l It is small, firm, reliable, suitable for field use, and cheap.
l User-optional large-suction magnetic sling is provided.

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