

PROVA-136 Temperature Calibrator (RTD + TC)



제품 특징

- High precision and combination of RTD and Thermocouple (TC) calibration
- Source and measure 14 types of RTD and resistance
- Source and measure 11 types of thermocouples (TC)
- 4W, 3W, and 2W connections for RTD simulation and measurement
- Current calibration of 4 fixed values (100µA, 250µA, 1mA, and 2mA)
- °C and °F selectable
- Accept wide range of excitation current (0.05mA to 5mA) for RTD simulation
- Individual Thermocouple cold junction compensation (CJC) for simulation and measurement of thermocouples. CJC can be used to fine tune temperature calibration.
- Easy 0% and 100% setup and operation
- Easy 25%▲ (up) and 25▼ (down) for temperature calibration.
- Individual memory of 0% and 100% setup for different RTD types and thermocouple types
- Auto step and auto ramp for easy linear calibration
- Detection of too low or too high excitation current (LO or HI) from the measurement device
- Warning of exceeding calibrator driving current (IEX)
- Memory of last setup when power off
- Easy numerical keypad for input
- Dot Matrix LCD with backlight
- Very low power consumption of 30mA with backlight off
- 15 minutes smart auto-power-off. 15 minutes timer resets itself when any input changes
- 2 minutes smart auto-backlight-off. 2 minutes timer resets itself when any input changes

▶ 브로슈어 출력

수정하기

삭제하기

기술적 세부 사항

Specifications apply from +18 °C to +28 °C unless stated otherwise. All specifications assume a 5-minute warm-up period.

Ohm Measure:

측정 범위(Ω)	분해능(Ω)
0.000Ω~100.00Ω	0.001Ω

100.00Ω-1000.0Ω	0.01Ω
1000.0Ω-7000.0Ω	0.1Ω
측정범위(Ω)	정확도(% of Reading + Floor)
0.000Ω-400.00Ω	0.015% ± 0.05Ω
400.00Ω-4000.0Ω	0.015% ± 0.5Ω
4000.0Ω-7000.0Ω	0.03% ± 1.0Ω

Ohm Source (Accuracy is based upon 4W connection):

측정범위(Ω)	Excitation Current from Measurement Device	Accuracy (% of Output + Floor)
1.0Ω-400.0Ω	0.5mA to 5mA	0.015%+0.1Ω
400.0Ω-1500.0Ω	0.05mA to 5mA	0.015%+0.5Ω
1500.0Ω-4000.0Ω	0.05mA to 5mA	0.015%+0.5Ω
4000.0Ω-7000.0Ω	0.05mA to 5mA	0.03%+1Ω

Ohm Resolution (Source): Range(Ω) ↘

측정범위(Ω)	분해능(Ω)
1.0Ω-7000.0Ω	0.1Ω

RTD resolution in °C:

측정범위	분해능(measure)	분해능(source)
-200°C - 0°C	0.1°C	0.1°C
0°C - 800°C	0.01°C	0.1°C

RTD measure in °C:

RTD Type (α)	Measure (°C)		Source Current
	측정범위	분해능	
10Ω Pt(385)	-200 - 100	1.5	2mA
	100 - 800	1.8	
50Ω Pt(385)	-200 - 100	0.4	2mA
	100 - 800	0.5	
100Ω Pt(385)	-200 - 100	0.2	1mA
	100 - 800	0.015%+0.18	
200Ω Pt(385)	-200 - 100	0.2	1mA
	100 - 630	0.015%+0.18	
500Ω Pt(385)	-200 - 100	0.3	250μA
	100 - 630	0.015%+0.28	
1000Ω Pt(385)	-200 - 100	0.2	100μA
	100 - 630	0.015%+0.18	
100Ω Pt(3902)	-200 - 100	0.2	1mA
	100 - 500	0.015%+0.18	
100Ω Pt(3916)	-200 - 100	0.2	1mA
	100 - 630	0.015%+0.18	
100Ω Pt(3926)	-200 - 100	0.2	1mA
	100 - 630	0.015%+0.18	

10Ω Cu(427)	-100 – 260	1.5	2mA
120Ω Ni(672)	-80 – 260	0.15	1mA
50Ω Cu(4S27)	-180 – 200	0.4	2mA
100Ω Cu(427)	-180 – 200	0.2	2mA
YSI400	15–50	0.2	100µA

RTD source in °C.

RTD Type (α)	Source(°C)	
	측정범위	분해능
10Ω Pt(385)	-200 – 100	1.5
	100 – 800	1.8
50Ω Pt(385)	-200 – 100	0.4
	100 – 800	0.5
100Ω Pt(385)	-200 – 100	0.2
	100 – 800	0.015%+0.18
200Ω Pt(385)	-200 – 100	0.2
	100 – 630	0.015%+0.18
500Ω Pt(385)	-200 – 100	0.3
	100 – 630	0.015%+0.28
1000Ω Pt(385)	-200 – 100	0.2
	100 – 630	0.015%+0.18
100Ω Pt(3902)	-200 – 100	0.2
	100 – 500	0.015%+0.18
100Ω Pt(3916)	-200 – 100	0.2
	100 – 630	0.015%+0.18
100Ω Pt(3926)	-200 – 100	0.2
	100 – 630	0.015%+0.18
10Ω Cu(427)	-100 – 260	1.5
120Ω Ni(672)	-80 – 260	0.15
50Ω Cu(4S27)	-180 – 200	0.4
100Ω Cu(427)	-180 – 200	0.2
YSI400	15–50	0.2

RTD Resolution in °F:

측정범위	분해능(measure)	분해능(source)
-328 °F – 32°F	0.1°F	0.1°F
32°F – 1472°F	0.1°F	0.1°F

RTD measure in °F:

RTD Type (α)	Measure(°F)		Source Current
	측정범위	분해능	
10Ω Pt(385)	-328 – 212	2.7	2mA
	212 – 1472	3.24	
50Ω Pt(385)	-328 – 212	0.72	2mA
	212 – 1472	0.9	

100Ω Pt(385)	-328 – 212	0.36	1 mA
	212 – 1472	0.015%+0.324	
200Ω Pt(385)	-328 – 212	0.36	1 mA
	212 – 1166	0.015%+0.324	
500Ω Pt(385)	-328 – 212	0.54	250 μA
	212 – 1166	0.015%+0.504	
1000Ω Pt(385)	-328 – 212	0.36	100 μA
	212 – 1166	0.015%+0.324	
100Ω Pt(3902)	-328 – 212	0.36	1 mA
	212 – 932	0.015%+0.324	
100Ω Pt(3916)	-328 – 212	0.36	1 mA
	212 – 1166	0.015%+0.324	
100Ω Pt(3926)	-328 – 212	0.36	1 mA
	212 – 1166	0.015%+0.324	
10Ω Cu(427)	-148 – 500	2.7	2 mA
120Ω Ni(672)	-112 – 500	0.27	1 mA
50Ω Cu(4S27)	-292 – 392	0.72	2 mA
100Ω Cu(427)	-292 – 392	0.36	2 mA
YSI400	59–122	0.36	250 μA

to the specifications :

RTD Type (α)	Source(°F)	
	측정 범위	분해능
10Ω Pt(385)	-328 – 212	2.7
	212 – 1472	3.24
50Ω Pt(385)	-328 – 212	0.72
	212 – 1472	0.9
100Ω Pt(385)	-328 – 212	0.36
	212 – 1472	0.015%+0.324
200Ω Pt(385)	-328 – 212	0.36
	212 – 1166	0.015%+0.324
500Ω Pt(385)	-328 – 212	0.54
	212 – 1166	0.015%+0.504
1000Ω Pt(385)	-328 – 212	0.36
	212 – 1166	0.015%+0.324
100Ω Pt(3902)	-328 – 212	0.36
	212 – 932	0.015%+0.324
100Ω Pt(3916)	-328 – 212	0.36
	212 – 1166	0.015%+0.324
100Ω Pt(3926)	-328 – 212	0.36
	212 – 1166	0.015%+0.324
10Ω Cu(427)	-148 – 500	2.7
120Ω Ni(672)	-112 – 500	0.27
50Ω Cu(4S27)	-292 – 392	0.72

100Ω Cu(427)	-292 - 392	0.36
YSI400	59-122	0.36

Temperature of Thermocouples

<!--[if ! supportEmp --> <!-- [endif]--> <!--[if ! supportEmp --> <!-- [endif]-->	°C		°F	
	측정범위	정확도	측정범위	정확도
K	-200~-150	0.7	-328~-238	1.26
	-150~0	0.6	-238~32	1.08
	0~1000	0.5	32~1832	0.90
	1000~1370	0.7	1832~2498	1.26
J	-200~-150	1.0	-382~-238	1.80
	-150~0	0.6	-238~32	1.08
	0~1050	0.7	32~1922	1.26
E	-200~-150	0.8	-382~-238	1.44
	-150~0	0.5	-238~32	0.90
	0~850	0.4	32~1562	0.72
	850~1000	0.4	1562~1832	1.26
T	-200~-150	0.7	-382~-238	1.44
	-150~0	0.6	-238~32	1.26
	0~400	0.5	32~752	0.54
R	0~500	1.5	32~982	2.70
	500~1760	1.0	932~3200	1.80
S	0~500	1.5	32~932	2.70
	500~1760	1.0	932~3200	1.80
N	-200~0	1.0	-328~32	1.80
	0~1300	0.6	32~2372	1.08
L	-200~0	0.8	-328~32	1.44
	0~900	0.6	32~1652	1.08
U	-200~0	1.1	-328~32	1.98
	0~600	0.5	32~1112	0.90
B	600~800	1.3	1112~1472	2.34
	800~1000	1.0	1472~1832	1.80
	1000~1820	0.9	1832~3308	1.62
C	0~1800	0.8	32~3272	1.44
	1800~2310	1.2	3272~4190	2.16

DC Output Current in the OHM measurement Manual mode (Operating Voltage<2.5V , Open Circuit:3.7V)

DC Current	Accuracy of reading
100µA	±0.015% 0±0.05µA
250µA	±0.015% 0±0.05µA
1mA	±0.015% 0±0.05µA

2mA

±0.015% 0±0.05µA

제 품 사 양

세부사항	내 용
크기	214.0(L) * 98.8(W) * 56.0(H) mm
Battery Type	1.5V LR6 AA x 5
Power Consumption	30mA with backliget off
Battery Life	60 Hours with backliget off (Alkaline type)
무게	63g / 22.2z (batteries included)
사용환경	0°C ~ 50°C(32°F ~ 122°F), 85% RH 이하
보관환경	-20°C ~ 60°C(-4°F ~ 140°F), 75% RH 이하
기본악세사리	사용설명서 Carrying case 1.5V SUM-3 AA x 5 Test leads with prods and alligator clips x 2 sets (black and red) Test leads with banana piugs and alligator clips x 1set (black and red) Stackable test leads for short circuit x 1 (10cm,black) K 타입 온도센서 (dual plug) x 1 K 타입 온도센서 (single plug) x 1