

Temperature Calibrator

➤ **Fluke 724 Temperature Calibrator**

The Fluke 724 is powerful yet easy-to-use temperature calibrator that sources and measures 10 thermocouple types, and 7 RTD types, plus volts and ohms.

1. Fluke 724 Temperature Calibrator



➤ Key Features

- Powerful, easy-to-use, high-accuracy temperature calibrator
- Test and calibrate temperature sensors and transmitters
- Measures 4 to 20 mA loops and can provide loop power
- Measures RTDs, thermocouples, ohms, and volts
- Source/simulates thermocouples, RTDs, volts, and ohms

Specifications: Fluke 724 Temperature Calibrator

Measurement Accuracy		
Voltage DC	30.000 V	0.02% + 2 counts (upper display)
	20.000 V	0.02% + 2 counts (lower display)
	100.00 mV	0.02% + 2 counts
	-10.00 mV to 75.00 mV	0.025% + 1 count (via TC connector)
Current DC	24.000 mA	0.02% + 2 counts
Resistance	0.0 to 400.0 Ω	0.1 Ω (4-wire), 0.15 Ω (2- and 3-wire)
	401 to 1500 Ω	0.5 Ω (4-wire), 1 Ω (2- and 3-wire)
	1500 to 3200 Ω	1 Ω (4-wire), 1.5 Ω (2- and 3-wire)

Source Accuracy

Voltage DC	100.00 mV	0.02% + 2 counts
	10.000 V	0.02% + 2 counts
	-10.00 mV to 75.00 mV	0.025 % + 1 count (via TC connector)
Resistance	15.0 to 400.0 Ω	0.15 Ω (exc. current 0.15 to 0.5 mA), 0.1 Ω (exc. current 0.5 to 2 mA)
	401 to 1500 Ω	0.5 Ω (excitation current 0.05 to 0.8 mA)
	1500 to 3200 Ω	1 Ω (excitation current 0.05 to 0.4 mA)

RTDs and Thermocouples

Measure accuracy	NI-120	0.2°C
	PT-100 (385)	0.33°C
	PT-100 (393)	0.3°C
	PT-100 (JIS)	0.3°C
	PT-200 (385)	0.2°C
	PT-500 (385)	0.3°C
	PT-1000 (385)	0.2°C
	Resolution	0.1°C

	J	0.7°C
	K	0.8°C
	T	0.8°C
	E	0.7°C
	R	1.8°C
	S	1.5°C
	B	1.4°C
	L	0.7°C
	U	0.75°C
	N	0.9°C
	Resolution	J, K, T, E, L, N, U: 0.1°C, 0.1°F B, R, S: 1°C, 1°F
	XK	0.6°C
	BP	1.2°C
Source accuracy	NI-120	0.2°C
	PT-100 (385)	0.33°C
	PT-100 (393)	0.3°C
	PT-100 (JIS)	0.3°C

PT-200 (385)	0.2°C
PT-500 (385)	0.3°C
PT-1000 (385)	0.2°C
Resolution	0.1°C
Accuracy stated for 4-wire measurement.	
J	0.7°C
K	0.8°C
T	0.8°C
E	0.7°C
R	1.4°C
S	1.5°C
B	1.4°C
L	0.7°C
U	0.75°C
N	0.9°C
Resolution	J, K, T, E, L, N, U: 0.1°C, B, R, S: 1°C
XK	0.6°C

	BP	1.2°C
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Specifications

Ramp functions	Source functions	Voltage, current, resistance, frequency, temperature
	Ramps	Slow ramp, Fast ramp, 25% step-ramp
Loop power function	Voltage	24 V
	Accuracy	10%
	Maximum current	22 mA, short circuit protected
Step functions	Source functions	Voltage, current, resistance, frequency, temperature
	Steps	25% of range, 100% of range

Environmental Specifications

Operating temperature	-10°C to 55°C	
Storage temperature	-20°C to 71°C	
Humidity (without condensation)	90%	10°C to 30°C
	75%	30°C to 40°C
	45%	40°C to 50°C
	35%	50°C to 55°C

Safety Specifications

Safety rating	CSA C22.2 No. 1010.1:1992
EMC	EN50082-1:1992 and EN55022:1994 Class B

Mechanical and General Specifications

Size	96 x 200 x 47 mm
Weight	650 g
Batteries	Four AA alkaline batteries
Warranty	Three years
Battery life	25 hours typical
Shock and vibration	Random, 2 G, 5-500 Hz