

Fluke 725 Multifunction Process Calibrator

FLUKE®



Easy-to-use field calibrator with functions to test and calibrate almost anything



- Small, streamlined shape makes it easy to carry
- Rugged, reliable design stands up to field use
- Easy-to-read measure/source screen lets you view input and output simultaneously
- Measure volts, mA, RTDs, thermocouples, frequency, and ohms to test sensors and transmitters
- Source/simulate volts, mA, thermocouples, RTDs, frequency, ohms, and pressure to calibrate transmitters
- Measure/source¹ pressure using any of 29 Fluke 700Pxx Pressure Modules
- Source mA with simultaneous pressure measurement to conduct valve and I/P tests
- Support flow meter testing with frequency and counts per minute (CPM) functions
- Perform fast linearity tests with auto step and auto ramp features
- Power transmitters during test using 24 V loop supply with simultaneous mA measurement
- Store frequently-used test setups for later use
- Three-year warranty

Intrinsically safe version available (see page 38)

¹ Requires accessory hand pump



Understanding specifications for process calibrators:

Application note
(Literature code 1261947)

Selection of a calibrator is often based on a specification sheet. This application note helps interpret and compare performance specifications typically used for process calibrators.



Want to read more? Download this and other application notes at www.fluke.com/library

Specifications - 724 and 725 Calibrators

Function Measure or Source	Range or Type	Resolution	Accuracy	Notes
Voltage	0 to 100 mV 0 to 10 V (source) 0 to 30 V (measure)	0.01 mV 0.01 V 0.01 V	.02 % Rdg + 2 LSD	Max load, 1 mA
mA ¹	0 to 24	0.001 mA	.02 % Rdg + 2 LSD	Max load, 1000 Ω ²
mV (TC terminals)	-10.00 mV to +75.00 mV	.01 mV	.025 % of range + 1 LSD	
Resistance	15 Ω to 3200 Ω	0.01 Ω to 0.1 Ω	0.10 Ω to 1.0 Ω	
Frequency (725 only)	2.0 to 1,000.0 CPM 1 to 1100 Hz 1.0 to 10.0 kHz	0.1 CPM 1 Hz 0.1 kHz	± 0.05 % ± 0.05 % ± 0.25 %	For frequency source; 5 V p-p squarewave, -0.1 V offset
Loop Supply	24 V dc (12 V 725Ex)	N/A	10%	
Thermocouples	J, K, T, E, L, N, U	0.1 °C, 0.1 °F	to 0.7 °C	
Thermocouples	B, R, S	1 °C, 1 °F	to 1.4 °C	
RTDs	Ni120 (672) Pt 100, 200, 500, 1000 (385) Pt 100 (3916) Pt 100 (3926)	0.1 °C, 0.1 °F	to 0.2 °C	

¹ On 724, mA is measure only ² 500 Ω 725Ex

Storage temperature: -20 °C to 71 °C

Operating temperature: -10 °C to 55 °C

Relative humidity: 90 % (10 °C to 30 °C); 75 % (30 °C to 40 °C); 45 % (40 °C to 50 °C); 35 % (50 °C to 55 °C)

Shock: 1 meter drop test

Safety: CSA C22.2 No. 1010.1:1992

EMC: EN50082-1:1992 and EN55022:1994 Class B

Size (HxWxD): 200 mm x 96 mm x 47 mm (7.9 in x 3.8 in x 1.9 in)

Weight: 650 g (23 oz)

Battery: Four AA alkaline batteries

Battery life: 25 hours typical

Warranty: Three-years

Simultaneous function capability	Channel A	Channel B
24.000 mA DC	M	M or S ¹
24.000 mA DC with 24 V loop supply	M ³	
100.00 mV DC		M or S
30.000 V DC measure	M	
20.000 V DC measure 10.000 VDC Source		M or S
15 to 3200 Ohms		M or S
Thermocouple J, K, T, E, R, S, B, L, U, N		M or S
RTD Ni120; Pt100 (392); Pt100 (JIS); Pt100, 200, 500, 1000 (385)		M or S
Pressure ² (requires Fluke 700PXX Modules)	M	M used as S
Frequency ² ; Squarewave, 1 CPM to 10 kHz; fixed amplitude 5 V p-p		M or S

M = Measure S = Source/Simulate

¹ On 724, mA is measure only

² Pressure and frequency on 725 only

³ 12 V loop supply on 725Ex

Recommended accessories - 725 Calibrator



TL75
Hard Point
Test Lead Set
See page 46



TL220
SureGrip Industrial
Test Lead Set
See page 45



C125
Meter Case
See page 54



ToolPak
Meter Hanging Kit
See page 55



80PE-27
SureGrip Industrial
Surface Temperature Probe
See page 52

Included accessories

TL75 Test Leads, AC72 Test Clips, one pair of stackable test leads, product overview manual (print) and user's manual (CD-ROM) in 14 languages.

Ordering information

Fluke-724 Temperature Calibrator (also see page 32)

Fluke-725 Multifunction Process Calibrator