

Fluke 725 Multifunction Calibrator



Simultaneous Function Capability	Channel A	Channel B
24.000 mA DC	M	M or S
24.000 mA DC with 24V loop supply	M	
100.00 mV DC		M or S
30.000V DC Measure	M	
20.000V DC Measure 10.000V DC 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 (requires Fluke 700PXX Modules)	M	M used as S
Frequency; Squarewave, 1 CPM to 10 kHz; fixed amplitude 5V p-p		M or S

M = Measure S = Source/Simulate

Simply Powerful!

The Fluke 725 Multifunction Process Calibrator is a powerful yet easy-to-use field calibrator. Use the measure and source functions to test and calibrate almost any process parameter.

- 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, and ohms to calibrate transmitters
- Measure/source pressure using any of 28 Fluke 700Pxx Pressure Modules
- Source mA with simultaneous pressure measurement to conduct valve and I/P tests
- Support flow meter testing with frequency and CPM functions
- Perform fast linearity tests with auto step and auto ramp features
- Power transmitters during test using loop supply with simultaneous mA measurement
- Store frequently-used test setups for later use
- Backlight lets you work in poor light
- Remote interface allows benchtop automated operations
- Large battery capacity of four AA cells
- Battery door for easy changes

Fluke. *Keeping your world up and running.*

Ordering information

Fluke 725 Multifunction Process Calibrator
Each calibrator includes: TL75 Test Leads, AC70A Test Clips, one pair of stackable test leads, Users Manuals appropriate to country of destination (English, plus three of: French, German, Spanish, Italian, Dutch, Norwegian, Danish, Swedish, Finnish, Portuguese, Korean, Chinese, and Japanese), Statement of Quality Assurance Practices; CE and CSA markings.

Specifications

Summary specifications (18°C to 28°C for one year)

Function Measure or Source	Range	Resolution	Accuracy	Notes
Voltage	0 to 100 mV 0 to 10V (source) 0 to 30V (measure)	0.01 mV 0.01V 0.01V	.02% Rdg + 2 LSD	Max load, 1 mA
mA	0 to 24	0.001 mA	.02% Rdg + 2 LSD	Max load, 1000Ω
mV (TC terminals)	-10.00 mV to +75.00 mV	.01 mV	.025% of range + 1 LSD	
Resistance	15Ω to 3200Ω	0.01Ω to 0.1Ω	0.10Ω to 1.0Ω	
Frequency	2.0 to 1000.0 CPM 1 to 1000 Hz 1.0 to 10.0 kHz	0.1 CPM 1 Hz 0.1 kHz	±.05% ±.05% ±.25%	For frequency source, waveform is 5V p-p squarewave, -0.1V offset
Loop Supply	24V dc	N/A	10%	

Temperature coefficient, -10°C to 18°C, 28°C to 55°C, ±.005% of range per °C.

Thermocouple accuracy specifications

Thermocouple	Measure or Source	
J	-200 to 0°C 0 to 1200°C	1.0°C 0.7°C
K	-200 to 0°C 0 to 1370°C	1.2°C 0.8°C
T	-200 to 0°C 0 to 400°C	1.0°C 0.8°C
E	-200 to 0°C 0 to 950°C	0.9°C 0.7°C
R	-20 to 0°C 0 to 500°C 500 to 1750°C	2.5°C 1.8°C 1.4°C
S	-20 to 0°C 0 to 500°C 500 to 1750°C	2.5°C 1.8°C 1.5°C
B	600 to 800°C 800 to 1000°C 1000 to 1800°C	2.2°C 1.8°C 1.4°C
L	-200 to 0°C 0 to 900°C	0.85°C 0.7°C
U	-200 to 0°C 0 to 400°C	1.1°C 0.75°C
N	-200 to 0°C 0 to 400°C	1.5°C 0.9°C
Resolution		
J, K, T, E, L, N, U		0.1°C, 0.1°F
B, R, S		1°C, 1°F
Notes		
Accuracy specifications include 0.2°C cold junction uncertainty.		

RTD ranges and accuracy specifications

RTD Types, Ranges and Accuracies			
		Measure (4 wire)	Source
Ni 120	-80°C to 260°C	0.2°C	0.2°C
Pt 100 - 385	-200°C to 800°C	0.33°C	0.33°C
Pt 100 - 3926	-200°C to 630°C	0.3°C	0.3°C
Pt 100 - 3916 (JIS)	-200°C to 630°C	0.3°C	0.3°C
Pt 200 - 385	-200°C to 250°C 250°C to 630°C	0.2°C 0.8°C	0.2°C 0.8°C
Pt 500 - 385	-200°C to 500°C 500 to 630°C	0.3°C 0.4°C	0.3°C 0.4°C
Pt 1000 - 385	-200°C to 100°C 100°C to 630°C	0.2°C 0.3°C	0.2°C 0.2°C
Resolution			
RTD	0.1°C, 0.1°F		

General specifications

Maximum voltage: 30V
Storage temperature: -40°C to 71°C
Operating temperature: 10°C to 55°C
Relative humidity: 95% (10°C to 35°C); 75% (30°C to 40°C); 45% (40°C to 50°C); 35% (50°C to 55°C)
Shock: 30g, 11ms, half-sine shock (or 1meter drop test)
Vibration: Random, 2g, 5-500 Hz
Safety: CSA C22.2 No. 1010.1:1992
EMC: EN50082-1:1992 and EN55022:1994 Class B
Size/weight: 96 x 200 x 47 mm (3.8 x 7.9 x 1.9 inches) 650g (23 oz)
Battery: Four AA alkaline batteries. Battery life: 25 hours typical
Warranty: Three years

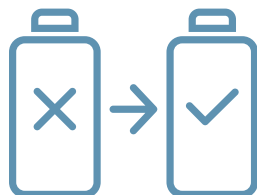
Fluke Premium Care plans

Coverage that prevents unexpected downtime caused by damaged test equipment, accessories, or tools in need of calibration or repair.



Accidental damage and repair

Avoid costly repairs and rest easy knowing that any damage to your test tool is covered



Replacement of damaged accessories

Replace damaged accessories that could be affecting the accuracy of your test results at no extra cost



Annual tool inspection, calibration, cleaning, and updating

Ensure your test tool is providing accurate results and adheres to regulatory compliance by leaving it in the hands of our experts



Expedited calibration and repair

Skip the wait—your calibration or repair will be expedited so you can get back to your tool and work faster

	Standard warranty	Premium Care-Standard	Premium Care-Gold
Repair manufacturing defects	•	•	•
Accidental damage and repair		•	•
Replacement of damaged accessories		•	•
Annual calibration or performance check		•	•
Expedited calibration and repair		•	•
Priority tech support		•	•
Software updates		•	•
Expedited shipping		•	•
Loaner equipment			•

Fluke Premium Care support plans selection chart

Description		Choose your Fluke Premium Care service level			
		1-year Standard	3-year Standard	1-year Gold	3-year Gold
Acoustic imagers	Fluke ii900 Industrial Acoustic Imager	FPC1S-II900-1	FPC3S-II900-1	-	-
	Fluke ii910 Precision Acoustic Imager	FPC1S-II910-1	FPC3S-II910-1	-	-
	Fluke ii900 Industrial Acoustic Imager with 1 Year of Premium Care-Standard	FLUKE-II900/FPC	-	-	-
	Fluke ii910 Precision Acoustic Imager with 1 Year of Premium Care-Standard	FLUKE-II910/FPC	-	-	-
PQ analyzers	Fluke 1770 Series Power Quality Analyzers (1773, 1775, 1777)	FPC1S-FPQ170-1	FPC3S-FPQ170-1	FPC1G-FPQ170-1	FPC3G-FPQ170-1
	Fluke 1775 Power Quality Analyzer with 1 Year of Premium Care-Standard	FLUKE-1775/FPC	-	-	-
	Fluke 1777 Power Quality Analyzer with 1 Year of Premium Care-Standard	FLUKE-1777/FPC	-	-	-
PQ loggers	Fluke 1730 Series Power Quality Loggers (1732, 1734, 1736, 1738)	FPC1S-FPQ173-1	FPC3S-FPQ173-1	FPC1G-FPQ173-1	-
	Fluke 1736 Series Power Quality Logger with 1 Year of Premium Care-Standard	FLUKE-1736/FPC	-	-	-
	Fluke 1738 Series Power Quality Logger with 1 Year of Premium Care-Standard	FLUKE-1738/FPC	-	-	-
Process tools	Fluke 754 and 753 Documenting Process Calibrator	FPC1S-FLUKE75X-1	FPC3S-FLUKE75X-1	-	-
	Fluke 729 Pressure Calibrators	FPC1S-FLUKE729-1	FPC3S-FLUKE729-1	-	-
	Fluke 726, 725 and 721 Precision Multifunction Calibrators	FPC1S-FLUKE72X-1	FPC3S-FLUKE72X-1	-	-
	Fluke 719PRO, 719 and 718 Pressure Calibrators	FPC1S-FLUKE71X-1	FPC3S-FLUKE71X-1	-	-
	Fluke 750P Pressure Modules	FPC1S-FLUKE-750PM-1	FPC3S-FLUKE-750PM-1	-	-
	Fluke 700G Pressure Gauges	FPC1S-FLUKE-700GA-1	FPC3S-FLUKE-700GA-1	-	-
	Fluke 754 Documenting Process Calibrator with 1 Year of Premium Care-Standard	FLUKE-754/FPC	-	-	-
	Fluke 726 Precision Multifunction Calibrator with 1 Year of Premium Care-Standard	FLUKE-726/FPC	-	-	-
	Fluke 725 Precision Multifunction Calibrator with 1 Year of Premium Care-Standard	FLUKE-725/FPC	-	-	-
Motor drive analyzers	Fluke MDA-550-III Motor Drive Analyzer	FPC1S-MDA-500-1	FPC3S-MDA-500-1	FPC1G-MDA-500-1	FPC3G-MDA-500-1
	Fluke MDA-550-III Motor Drive Analyzer with 1 Year of Premium Care-Standard	FLUKE-MDA-550/FPC	-	-	-
Multi-function PV testers	Fluke SMFT-1000 PV Analyzer I-V Curve Tracer	FPC1S-SMFT-1000-1	FPC3S-SMFT-1000-3		
	Fluke SMFT-1000 PV Analyzer I-V Curve Tracer with 1 Year of Premium Care-Standard	FLK-SMFT-1000/FPC	-	-	-
Scope meters	Fluke ScopeMeter 190 Series III (190-062, 190-102, 190-104, 190-202, 190-204, 190-502, 190-504)	FPC1S-SCM190-1	FPC3S-SCM190-1	FPC1G-SCM190-1	FPC3G-SCM190-1
	Fluke 190-504-III ScopeMeter Test Tool with 1 Year of Premium Care-Standard	FLUKE-190-504/FPC	-	-	-