Multifunction Process Calibrator

- **Fluke 725 Multifunction Process Calibrator**

  With the Fluke 725 Multifunction Process Calibrator you can easily source and measure almost any process parameter and test almost any process device. Measure and source mA, volts, temperature (RTDs and thermocouples), frequency, ohms, and pressure, using optional pressure modules.

1. **Fluke 725 Multifunction Process Calibrator**

➢ **Key Features**

- Calibration of both temperature and pressure transmitters
- Measure/source/simulate mA loop parameters
- Measure and source mA, Volts DC, frequency, and resistance
- Built-in 24 V loop power supply
- Store and recall frequently used calibration set ups

• Specifications: Fluke 725 Multifunction Process Calibrator

Measurement Accuracy		
Voltage DC	30.000 V	0.02% + 2 counts (upper display)
	30.000 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)
Frequency	2.0 to 1000.0 CPM	0.05% + 1 count
	1.0 to 1100.0 Hz	0.05% + 1 count
	1.00 to 10.00 kHz	0.05% + 1 count
	Sensitivity	1 V peak-to-peak-minimum
Pressure	Accuracy from 0.025% of range using any of 29 pressure modules (for detailed specifications refer to pressure modules in options and accessories). Modules available for differential, gauge, vacuum, absolute, dual and high pressure.	
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)
Current DC	24.000 mA (source)	0.02% + 2 counts
	24.000 mA (simulate)	0.02% + 2 counts
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)
Frequency	2.0 to 1000.0 CPM	0.05%

	1.0 to 1100.0 Hz	0.05%
	1.00 to 10.00 kHz	0.25%
	Waveform	5 V p-p squarewave, -0.1 V offset
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
Specifications		
Ramp functions	Source functions	Voltage, current, resistance, frequency, temperature
	Ramps	Slow ramp, Fast ramp, 25% step-ramp
	Voltage	24 V

Loop power function	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	
Operating altitude	3000 m	
Safety Specifications		
Agency approvals	EN 61010-1:1993, ANSI/ISA S82.01-1994; CAN/CSA C22.2 No 1010.1:1992	
Mechanical and General Specifications		
Size	130 x 236 x 61 mm	
Weight	0.65 kg	
Batteries	4 AA alkaline batteries	
Battery replacement	Separate battery compartment, accessable without breaking calibration seal	

Side port connections	Pressure module connector, also used for remote real-time programming