Fluke 725 Multifunction Process Calibrator Specifications

Summary Specifications (18°C to 28°C for one year)*		
Voltage (max load, 1 mA)	**0 to 100 mV:** Resolution: 0.01 mV Accuracy:.02% Rdg + 2 LSD **0 to 10V (source):** Resolution: 0.001V Accuracy:.02% Rdg + 2 LSD **0 to 30V (measure):** Resolution: 0.001V Accuracy:.02% Rdg + 2 LSD	
mA (max load, 1000Ω)	**0 to 24 mA:** Resolution:0.001 mA Accuracy: .02% Rdg + 2 LSD	
mV (TC terminals)	**-10.00 mV to +75.00 mV:** Resolution: .01 mV Accuracy: .025% Rdg + 1 LSD	
Resistance	**0Ω to 3200Ω (measure):** Resolution: 0.01Ω to 0.1Ω Accuracy: 0.10Ω to 1.0Ω **15Ω to 3200Ω (source):** Resolution: 0.01Ω to 0.1Ω Accuracy: 0.10Ω to 1.0Ω	
Frequency**	**1 CPM to 10 kHz (measure):** Resolution: 5 digits Accuracy: 0.05% Rdg + 1 LSD	

		2.0 to 1000.0 CPM (source): Resolution: 0.1 CPM Accuracy: ±.05% **1 to 1000 Hz (source):** Resolution: 1 Hz Accuracy: ±.05% **1.0 to 10.0 kHz (source):** Resolution: 0.1 kHz Accuracy: ±.25%	
Loop Supply		**24V dc:** Resolution: N/A Accuracy: 10%	

* Temperature coefficient, -10°C to 18°C, 28°C to 55°C,±.005% of range per °C.
** (For frequency source, waveform is 5V p-p squarewave, -0.1V offset)

Thermocouple Accuracy Specifications*			
J		**-200 to 0ºC:** Accuracy: 1.0ºC **0 to 1200ºC:** Accuracy: 0.7ºC	
K		**-200 to 0ºC:** Accuracy: 1.2ºC **0 to 1370ºC:** Accuracy: 0.8ºC	
T		**-200 to 0ºC:** Accuracy: 1.0ºC **0 to 400ºC:** Accuracy: 0.8ºC	
E		**-200 to 0ºC:** Accuracy: 0.9ºC **0 to 950ºC:** Accuracy: 0.7ºC	
R		**-20 to 0ºC:** Accuracy: 2.5ºC **0 to 500ºC:** Accuracy: 1.8ºC **500 to 1750ºC:**	

		Accuracy: 1.4ºC	
S		**-20 to 0ºC:** Accuracy: 2.5ºC **0 to 500ºC:** Accuracy: 1.8ºC **500 to 1750ºC:** Accuracy: 1.5ºC	
B		**600 to 800ºC:** Accuracy: 2.2ºC **800 to 1000ºC:** Accuracy: 1.8ºC **1000 to 1800ºC:** Accuracy: 1.4ºC	
L		**-200 to 0ºC:** Accuracy: 0.85ºC **0 to 900ºC:** Accuracy:0.7ºC	
U		**-200 to 0ºC:** Accuracy: 1.1ºC **0 to 400ºC:** Accuracy: 0.75ºC	
N		**-200 to 0ºC:** Accuracy: 1.5ºC **0 to 1300ºC:** Accuracy: 0.9ºC	

* (Accuracy specifications include 0.2°C cold junction uncertainty)

Thermocouple Resolution			
J, K, T,	**E, L, N, U**	0.1ºC, 0.1ºF	
B, R, S		1ºC, 1ºF	

RTD Ranges and Accuracy Specifications			
Ni 120		**-80ºC to 260ºC:** Measure: 0.2ºC Source: 0.2ºC	

Pt 100	**- 385**	**-200ºC to 800ºC:** Measure: 0.33ºC Source: 0.33ºC	
Pt 100	**- 3926**	**-200ºC to 630ºC:** Measure: 0.3ºC Source: 0.3ºC	
Pt 100 (JIS)	**- 3916**	**-200ºC to 630ºC:** Measure: 0.3ºC Source: 0.3ºC	
Pt 200	**- 385**	**-200ºC to 250ºC:** Measure: 0.2ºC Source: 0.2ºC **250ºC to 630ºC:** Measure: 0.8ºC Accuracy: 0.8ºC	
Pt 500	**- 385**	**-200ºC to 500ºC:** Measure: 0.3ºC Source: 0.3ºC **500ºC to 630ºC:** Measure: 0.4ºC Accuracy: 0.4ºC	
Pt 1000	**-385**	**-200ºC to 100ºC** Measure: 0.2ºC Source: 0.2ºC **100ºC to 630ºC** Measure: 0.3ºC Source: 0.2ºC	

RTD Resolution			
RTD		0.1ºC, 0.1ºF	

General Specifications			
Maximum voltage		30V	
Storage Temperature		-20ºC to 71ºC	
Operating Temperature		-10ºC to 55ºC	
Relative Humidity		90% (10ºC to 30ºC); 75% (30ºC to 40ºC); 45% (40ºC to 50ºC); 35% (50ºC to 55ºC)	
Vibration		Random, 2g, 5-500 Hz	

Safety	CSA C22.2 No. 1010.1:1992
EMC	EN50082-1:1992 and EN55022:1994 Class B
Size	96 x 200 x 47 mm (3.8 x 7.9 x 1.9 inches)
Weight	650g (23oz)
Battery	Four AA alkaline batteries. Battery life: 25 hours typical
Warranty	Three years