

Multifunction Process Calibrator

Precision Simultaneous Source and Measure

For thermocouples (Types R, S, J, K, T, E, N and B), RTD, mA, mV, V, Hz, and Ω devices

Features:

- Simultaneously source excitation voltage and measure mA output of 2-wire transmitters
- Source 0 to 22mA with 1 μ A resolution
- Measure 0 to 50mA (1 μ A resolution)
- Select Type R, S, J, K, T, E, N, or B thermocouple and RTD (Pt100, Pt1000) for precision calibrations in $^{\circ}$ F/ $^{\circ}$ C
- Output 0 to 100mV, 0 to 1V, or 0 to 10.0000V
- Measure 0 to 50.00V
- Single/continuous step function for Voltage and Current
- Self-contained 24V loop power supply drives current loads up to 1000 Ω
- Complete with four AAA batteries and test leads



Specifications	Range	Accuracy
Source		
Current	0.000 to 22.00mA	$\pm(0.02\%$ of reading $\pm 0.02\%$ Range)
Voltage	-1.0000V to 11.0000V	$\pm(0.02\%$ of reading $\pm 0.01\%$ Range)
Resistance	0.00 to 40.000K Ω	$\pm(0.02\%$ of reading $\pm 0.025\%$ Range)
Type J	-328 to 2192 $^{\circ}$ F (-200 to 1200 $^{\circ}$ C)	$\pm 1.2^{\circ}$ F or 0.7 $^{\circ}$ C
Type K	-328 to 2501 $^{\circ}$ F (-200 to 1372 $^{\circ}$ C)	$\pm 1.6^{\circ}$ F or 0.9 $^{\circ}$ C
RTD (Pt100)	-328 to 1472 $^{\circ}$ F (-200 to 800 $^{\circ}$ C)	$\pm 1.4^{\circ}$ F or 0.8 $^{\circ}$ C
Frequency	1.00Hz to 110kHz	± 2 digits
Pulse	1.0 to 100000 cycles	± 2 digits
Switch (open/close)	1.00Hz to 110kHz	± 2 digits
Loop Power	24V	$\pm 10\%$
Max. Load	1000 @ 20mA	
Measure		
Current	-5.000 to 55.000mA	$\pm(0.02\%$ of reading $\pm 0.01\%$ Range)
Voltage	-5.000mV to 55.00V	$\pm(0.02\%$ of reading $\pm 0.01\%$ Range)
Resistance	0.00 to 5.5000k Ω	$\pm(0.05\%$ of reading $\pm 0.02\%$ Range)
Type J	-76 to 2192 $^{\circ}$ F (-60 to 1200 $^{\circ}$ C)	$\pm 1.8^{\circ}$ F or 1.0 $^{\circ}$ C
Type K	-148 to 2501 $^{\circ}$ F (-100 to 1372 $^{\circ}$ C)	$\pm 2.1^{\circ}$ F or 1.2 $^{\circ}$ C
RTD (Pt100)	-328 to 1472 $^{\circ}$ F (-200 to 800 $^{\circ}$ C)	$\pm 1.4^{\circ}$ F or 0.8 $^{\circ}$ C
Frequency	3Hz to 50.000kHz	± 2 digits
Continuity	<50 Ω	
Dimensions/Weight	8 x 3.7 x 1.7" (205 x 95 x 42mm)/1.1lbs (500g)	

Ordering Information:

PRC70Multifunction Calibrator
PRC70-NIST ..PRC70 with NIST Certificate