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A FLIR COMPANY

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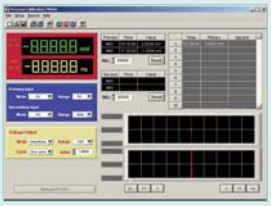
PRODUCT DATASHEET

Process Calibrator MultiMeter™

Precision DC, mA, Voltage, Frequency Calibrator

Combined with True RMS MultiMeter



Optional software records output and input and generates calibration report

Features:

- Simultaneous source/simulate and measure on large dual display
- Precision 0.03% accurate voltage and current calibration source
- Constant current output for loads up to 1200Ω
- Bipolar current (±25mA) and voltage (±1.5V, ±15V) outputs
- Simultaneously source 15V excitation voltage and measure mA output of 2-wire transmitters
- % of scale readout for 4 to 20mA or 0 to 20mA
- Wide range Frequency (square wave) source with adjustable amplitude, pulse width, and duty cycle
- Programmable 16 continuous or timed step outputs, or 999 step ramp
- Optional communications software allows you to remotely operate the CMM-17 from your PC and document readings

DMM Features:

- Measure DCmA, ACmA, DCV, ACV, AC+DC, Temperature, Frequency, Duty Cycle, Pulse Width, Resistance, Continuity, and Diode
- 1µV or 1µA resolution and 0.03% basic DCV accuracy (400mV-40V)
- 1ms Peak Hold for glitch capture, plus Data Hold, Auto Hold, relative and dynamic recording
- True RMS measurement for non-linear voltage and current loads

Common Features:

- Built-in bi-directional RS-232 interface
- Built-in NiMH rechargeable battery
- Large 50,000 count backlit LCD displays primary, secondary, source/measure ranges and functions selected
- Separate input/output banana jacks with fused protection
- Auto power off with disable function
- Complete kit with input/output test leads, Type K temperature probe, 8 NiMH rechargeable batteries, 100V-250V AC adaptor/recharger, and carrying case

Specifications			
Source (Output)	Ranges	Max Res.	Accuracy (% output + digits)
DC Voltage	±1.5	100µV	
	±15V	1mV	±(0.03% + 3)
DC Current	±25mA	1µA	±(0.03% + 5)
	(Max load 1200Ω)		
Square Wave	28 Frequencies	0.01Hz	±(0.005% + 1)
(0.5,1,2,5,10,15,20,25,30,40,50,60,75,80,100,120,150,200,240,300,400, 480,600,800,1200,1600,2400,4800 Hz)			
Duty Cycle	0.39% to 99.60%	0.390625%	±(0.01% + 0.02%)
Pulse Width	1/frequency	Range/256	±(0.01% + 0.3ms)
Amplitude	5V, ±5V, 12V, ±12V	0.1V	±(2% + 0.2V)
Measure (Input)	Ranges	Max Res.	Accuracy (% rdg + digits)
DC Voltage	50mV	1µV	±(0.05% + 50d)
	500mV, 5V, 50V	10µV	±(0.03% + 5d)
	250V	10mV	
AC Voltage (45-20kHz)	50,500mV, 5,50,250V	1µV	±(1.5% + 20d) @50/60Hz
DC Current	50mA, 500mA	1µA	±(0.3% + 5d)
AC Current (45Hz-2kHz)	50mA, 500mA	1µA	±(0.6% + 20d)
AC + DC Voltage	50,500mV, 5,50,250V	1µV	±(0.8% + 25d) @50/60H
AC + DC Current	50mA, 500mA	1µA	±(1.2% + 10d)
1ms Peak Hold (Glitch capture)		50,500mV, 5,50,250V	1µV ±(2% + 400d)
	50mA, 500mA	1µA	
Resistance	500,5k,50k,500k,5MV	0.01V	±(0.15% + 5d)
	50MV	1kV	±(1% + 8d)
Temperature (Type K)	-40°F to 2502°F	1/0.1°F	±(0.3% + 6°F)
	-40°C to 1372°C	1/0.1°C	±(0.3% + 3°C)
Frequency	100Hz,1,10,100,200kHz		0.001Hz ±(0.02% + 3d)
Duty Cycle	0.1-99.9%		±(0.3% per kHz +0.3%)FS
Pulse Width	0.1-1999.9mS		±(0.2% + 3d)
Diode Check / Continuity	0.45mA @ <4.8V / Beeper < 10Ω on 400Ω range		
Dimensions/Weight:	2.1 x 3.54 x 7.56"(54 x 90 x 192mm) / 3.75lbs 1.71kg)		

Ordering Information:

CMM-17 .....Process Calibrator MultiMeter™
CMM-17-NIST ....CMM-17 with NIST Certificate
CMM-17-S .....PC Software and RS-232 cable

CE EN 61010-1 CAT II 250V 3 YEARS WARRANTY

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CMM-17S