

SPECIFICATIONS

DC VOLTAGE

RANGE	MAXIMUM READING	ACCURACY (12 months)	MAXIMUM ALLOWABLE INPUT
		18°-28°C ± (% rdg + digits)	
200mV	199.99	0.04% + 3d	1200V momentary
2 V	1.9999	0.04% + 1d	1200V momentary
20 V	19.999	0.04% + 1d	1200V
200 V	199.99	0.04% + 1d	1200V
1200 V	1200.0	0.04% + 1d	1200V

Temperature Coefficient (0°-18° and 28°-55°C):
 $\pm(0.006\% + 0.2 \text{ digit})/^{\circ}\text{C}$ except $\pm(0.006\% + 0.4 \text{ digit})/^{\circ}\text{C}$
 on the 200mV range.
 Input Resistance: 10M Ω $\pm 0.1\%$

Normal Mode Rejection Ratio:
 Greater than 60dB at 50Hz and 60Hz.
 Common Mode Rejection Ratio (1k Ω unbalance):
 Greater than 120dB at DC, 50Hz and 60Hz.
 Settling Time: 1 second to within 1 digit of final reading.

AC VOLTAGE

RANGE	MAXIMUM READING	ACCURACY (12 months) (above 2000 counts) 18°-28°C: 100Hz-10kHz ±(% rdg + digits)		TEMPERATURE COEFFICIENT 0°-18° and 28°-55°C ±(% rdg + digits)/°C	
				45Hz-10kHz	10kHz-20kHz
200mV	199.99	0.7% + 15d		0.07% + 2d	0.15% + 3d
2 V	1.9999	0.6% + 15d		0.07% + 2d	0.15% + 3d
20 V	19.999	0.5% + 15d		0.05% + 2d	0.05% + 2d
200 V	199.99	0.5% + 15d		0.05% + 2d	0.05% + 2d
1000 V	1000.0	0.5% + 15d		0.05% + 2d	0.05% + 2d

Extended Frequency Accuracy:
 (45Hz-100Hz) $\pm(0.7\% + 15 \text{ digits})$
 (10kHz-20kHz) $\pm(0.8\% + 15 \text{ digits})$ on the 20V and higher
 ranges, $\pm(1.5\% + 15 \text{ digits})$ on the 2V range, $\pm(12\% + 15 \text{ digits})$
 on the 200mV range.
 Response: True root mean square.
 Crest Factor: 3.

Input Impedance:
 1M Ω $\pm 1\%$ shunted by less than 75pF.
 Maximum Allowable Input Voltage:
 1000V rms, 1400V peak, 10⁷V-Hz maximum.
 Common Mode Rejection Ratio (1k Ω unbalance):
 60dB at DC, 50Hz and 60Hz.
 Settling Time: 2.5 seconds to within 10 digits of final reading.

DC AND TRMS AC CURRENT

RANGE	MAXIMUM READING	ACCURACY (12 months) 18°-28°C +(% rdg + digits)		MAXIMUM VOLTAGE BURDEN	SHUNT RESISTANCE
		DC	AC 45Hz-10kHz (above 2000 counts)		
200 μ A	199.99	0.2% + 2d	1% + 15d	0.2 V	1k Ω
2mA	1.9999	0.2% + 2d	1% + 15d	0.2 V	100 Ω
20mA	19.999	0.2% + 2d	1% + 15d	0.2 V	10 Ω
200mA	199.99	0.2% + 2d	1% + 15d	0.25V	1 Ω
2000mA	1999.9	0.2% + 2d	1% + 15d	0.6 V	0.1 Ω
20 A**	19.999	0.5% + 2d	1% + 15d* (1kHz max)	0.65V	0.01 Ω

*Add 0.1% rdg above 15A for self-heating.
 **20A range on Model 179-250A only.
 MAXIMUM INPUT: 2A, 250V DC or rms (fuse protected)
 except for 20A range.
 15A continuous, 20A for 1 minute (50% duty cycle),
 250V dc or rms (fuse protected) on 20A range.

Temperature Coefficient (0°-18° and 28°-55°C):
 DC $\pm(0.01\% + 0.2 \text{ digit})/^{\circ}\text{C}$
 AC $\pm(0.07\% + 2 \text{ digit})/^{\circ}\text{C}$
 Crest Factor: 3
 Settling Time: DC: 1 second to within 1 digit of final reading.
 AC: 2.5 seconds to within 10 digits of final reading.

RESISTANCE

RANGE	MAXIMUM READING	ACCURACY (12 months) 18°-28°C ±(% rdg + digits)		MAXIMUM VOLTAGE ACROSS UNKNOWN ON RANGE	TEMPERATURE COEFFICIENT 0°-18° and 28°-55°C ±(% rdg + digits)/°C		NOMINAL APPLIED CURRENT	
		HI Ω	LO Ω		HI Ω	LO Ω	HI Ω	LO Ω
2k Ω	1.9999	—	0.15% + 15d	—	0.2V	—	—	100 μ A
20k Ω	19.999	0.04% + 1d	0.15% + 15d	2V	0.2V	0.003% + 0.2d	0.02% + 2d	100 μ A
200k Ω	199.99	0.04% + 1d	0.15% + 15d	2V	0.2V	0.003% + 0.2d	0.02% + 2d	10 μ A
2000k Ω	1999.9	0.04% + 1d	0.15% + 15d	2V	0.2V	0.003% + 0.2d	0.03% + 2d	1 μ A
20M Ω	19.999	0.10% + 1d	—	2V	—	0.02 % + 0.2d	—	0.1 μ A

Maximum Allowable Input:
 450V rms sustained, 1KV DC or peak AC momentary.
 Maximum Open-Circuit Voltage: 5 volts.

Settling Time: 1 second to within 1 digit of final reading except
 2 seconds on the 20M Ω range.

GENERAL

DISPLAY: Five 0.5" LED digits, appropriate decimal position
 and polarity indication.
 CONVERSION PERIOD: 400 milliseconds.
 ENVIRONMENT:
 Operating: 0°C to 55°C.
 0 to 80% relative humidity up to 40°C.
 Storage: -25°C to +65°C.

POWER: 105-125 or 210-250 volts (switch selected), 90-110V
 available, 50-60Hz, 7 watts. Optional 6 hour battery pack,
 Model 1788.
 DIMENSIONS, WEIGHT: 85mm high x 235mm wide x 275mm
 deep (3-1/2 in. x 9-1/4 in. x 10-3/4 in.).
 Net weight: 1.7kg (3 lbs., 13 oz.).
 OVER RANGE INDICATION: Display blinks all zeros above
 19999 counts.
 MAXIMUM COMMON MODE VOLTAGE: 1400V peak.