

SPECIFICATIONS

DC VOLTS

RANGE	RESOLUTION	ACCURACY (1 YEAR)		MAXIMUM ALLOWABLE INPUT
		18°-28°C	± (%rdg + digits)	
200mV	10 μ V	0.04% + 3d		1200V†
2 V	100 μ V	0.04% + 1d		1200V†
20 V	1mV	0.04% + 1d		1200V†
200 V	10mV	0.04% + 1d		1200V†
1200 V	100mV	0.04% + 1d		1200V†

†For 10 seconds. ‡Continuous.

AC VOLTS

RANGE	RESOLUTION	ACCURACY (1 YEAR)		TEMPERATURE COEFFICIENT	
		(above 2000 counts)	18°-28°C; 100Hz-10kHz	0°-18°C & 28°-55°C	± (%rdg + digits)/°C
200mV	10 μ V	0.7% + 15d		45Hz-10kHz	0.07% + 2d
2 V	100 μ V	0.6% + 15d		10kHz-20kHz	0.15% + 3d
20 V	1mV	0.5% + 15d			0.05% + 2d
200 V	10mV	0.5% + 15d			0.05% + 2d
1000 V	100mV	0.5% + 15d			0.05% + 2d

EXTENDED FREQUENCY ACCURACY:

(45Hz-100Hz): $\pm (0.7\% + 15d)$.

(10kHz-20kHz): $\pm (0.8\% + 15d)$ on 20V and higher ranges;

$\pm (1.5\% + 15d)$ on 2V range;

$\pm (2\% + 15d)$ on 200mV range.

RESPONSE: True root mean square.

CREST FACTOR (ratio of peak value to rms value): 3:1.

INPUT IMPEDANCE: 1M Ω 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 seconds to within 15 digits of final reading.

OHMS

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

MAXIMUM ALLOWABLE INPUT: 1kV DC or peak AC for 10 seconds, 450V rms continuous.

MAXIMUM OPEN CIRCUIT VOLTAGE: 5V.

GENERAL

DISPLAY: Five 0.5" LED digits, appropriate decimal position and polarity indication.

CONVERSION PERIOD: 400ms.

OVERRANGE INDICATION: Display blinks all zeroes above 19999 counts.

MAXIMUM COMMON MODE VOLTAGE: 1400V peak.

ENVIRONMENT: Operating: 0°-55°C, 0% to 80% relative humidity up to 35°C. Storage: -25°C to +65°C.

POWER: 105-125V or 210-250V (switch selected), 90-110V available. 50-60 Hz, 5.5W. Optional 6-hour battery pack, Model 1788.

DIMENSIONS, WEIGHT: 85mm high \times 235mm wide \times 275mm deep (3 1/2" \times 9 1/4" \times 10 3/4"). Net weight 1.8kg (4 lbs.).

TEMPERATURE COEFFICIENT (0°-18°C & 28°-55°C): $\pm (0.006\% + 0.2d)$ /°C except $\pm (0.006\% + 0.4d)$ /°C on 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.

DC AND TRMS AC AMPS

RANGE	RESOLUTION	ACCURACY (1 YEAR)		MAXIMUM VOLTAGE BURDEN	SHUNT RESISTANCE
		18°-28°C	± (%rdg + digits)		
200 μ A	10 nA	0.2% + 2d	1% + 15d	0.2 V	1 k Ω
2mA	100 nA	0.2% + 2d	1% + 15d	0.2 V	100 Ω
20mA	1 μ A	0.2% + 2d	1% + 15d	0.2 V	10 Ω
200mA	10 μ A	0.2% + 2d	1% + 15d	0.25V	1 Ω
2000mA	100 μ A	0.2% + 2d	1% + 15d	0.6 V	100m Ω
20 A	1mA	0.5% + 2d*	1% + 15d†*	0.5 V	10m Ω

*Add 0.1%rdg above 15A for self-testing.

†1kHz max.

MAXIMUM INPUT: 2A, 250V DC or rms (fuse protected) except for 20A range: 15A continuous, 20A for 1 minute (unfused).

TEMPERATURE COEFFICIENT (0°-18°C & 28°-55°C):

DC $\pm (0.01\% + 0.2d)$ /°C.

AC $\pm (0.07\% + 2d)$ /°C.

CREST FACTOR (ratio of peak value to rms value): 3:1.

SETTLING TIME: DC: 1 second to within 1 digit of final reading. AC: 2 seconds to within 15 digits of final reading.

ACCESSORIES AVAILABLE:

Model 1010: Single Rack Mounting Kit

Model 1017: Dual Rack Mounting Kit

Model 1301: Temperature Probe

Model 1600A: High Voltage Probe (40kV)

Model 1651: 50-Ampere Current Shunt

Model 1681: Clip-On Test Lead Set

Model 1682A: RF Probe

Model 1683: Universal Test Lead Kit

Model 1684: Hard Shell Carrying Case

Model 1685: Clamp-On AC Probe

Model 1691: General Purpose Test Lead Set

Model 1788: Rechargeable Battery Pack

Model 1792: Isolated BCD Output

Model 1793: Isolated IEEE-488 Output

Model 7008-3: IEEE-488 Cable (3 ft.)

Model 7008-6: IEEE-488 Cable (6 ft.)