

SPECIFICATIONS

DC VOLTS

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

TEMPERATURE COEFFICIENT (0°-18°C & 28°-55°C): ± (0.006% + 0.2d) /°C except ± (0.006% + 0.4d) /°C on 200mV range.

INPUT RESISTANCE: 10MΩ ± 0.1%.

NORMAL MODE REJECTION RATIO: Greater than 60dB at 50Hz and 60Hz.

COMMON MODE REJECTION RATIO (1kΩ unbalance): Greater than 120dB at DC, 50Hz and 60Hz.

SETTLING TIME: 1 second to within 1 digit of final reading.

AC VOLTS

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

EXTENDED FREQUENCY ACCURACY:

(45Hz-100Hz): ± (0.7% + 15d).

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

± (1.5% + 15d) on 2V range;

± (2% + 15d) on 200mV range.

RESPONSE: True root mean square.

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

INPUT IMPEDANCE: 1MΩ shunted by less than 75pF.

MAXIMUM ALLOWABLE INPUT VOLTAGE: 1000V rms, 1400V peak, 10⁷V•Hz maximum.

COMMON MODE REJECTION RATIO (1kΩ unbalance): 60dB at DC, 50Hz and 60Hz.

SETTLING TIME: 2 seconds to within 15 digits of final reading.

DC AND TRMS AC AMPS

RANGE	RESOLUTION	ACCURACY (1 YEAR) 18°-28°C		MAXIMUM VOLTAGE BURDEN	SHUNT RESISTANCE
		± (%rdg + digits)			
		DC	AC 45Hz-10kHz (above 2000 cts)		
200 μA	10 nA	0.2% + 2d	1% + 15d	0.2 V	1 kΩ
2mA	100 nA	0.2% + 2d	1% + 15d	0.2 V	100 Ω
20mA	1 μA	0.2% + 2d	1% + 15d	0.2 V	10 Ω
200mA	10 μA	0.2% + 2d	1% + 15d	0.25V	1 Ω
2000mA	100 μA	0.2% + 2d	1% + 15d	0.6 V	100mΩ
20 A	1mA	0.5% + 2d*	1% + 15d†*	0.5 V	10mΩ

*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 ± (0.01% + 0.2d) /°C.

AC ± (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.

OHMS

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

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

MAXIMUM OPEN CIRCUIT VOLTAGE: 5V.

SETTLING TIME: 1 second to within 1 digit of final reading except 2 seconds on 20MΩ range. Ohms settling time is specified for on-scale readings. 20MΩ is 5s for overrange to on-scale readings.

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 × 235mm wide × 275mm deep (3½" × 9¼" × 10¾"). Net weight 1.8kg (4 lbs.).

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.)