

SPECIFICATIONS

DC VOLTS (5½ Digits)

RANGE	RESOLUTION	INPUT	ACCURACY ¹ ±(%rdg + counts)		
			24 Hours ²	90 Days	1 Year
			23 ± 1°C	18°-28°C	18°-28°C
300 mV	1 µV	>1 GΩ	0.004 + 3 ³	0.009 + 3 ³	0.012 + 3 ³
3 V	10 µV	>1 GΩ	0.003 + 2	0.006 + 2	0.007 + 2
30 V	100 µV	11 MΩ	0.004 + 2	0.008 + 2	0.009 + 2
300 V	1 mV	10 MΩ	0.004 + 2	0.008 + 2	0.009 + 2

¹For 4½-digit accuracy, count error is 5 (except 15 on 300mV range).²Relative to calibration standards.³When properly zeroed.

CMRR: >120dB at dc, 50Hz or 60Hz (±0.05%) with 1kΩ in either lead.

NMRR: >60dB at 50Hz or 60Hz (±0.05%).

MAXIMUM ALLOWABLE INPUT: 300V rms or 425V peak, whichever is less.

OHMS (5½ Digits)

RANGE	RESOLUTION	NOMINAL I-SHORT	ACCURACY ¹ ±(%rdg + counts)		
			24 Hours ²	90 Days	1 Year
			23 ± 1°C	18°-28°C	18°-28°C
300 Ω	1 mΩ	1.7 mA	0.005 + 4 ³	0.009 + 4 ³	0.012 + 4 ³
3 kΩ	10 mΩ	1.7 mA	0.004 + 2	0.008 + 3	0.009 + 3
30 kΩ	100 mΩ	160 µA	0.004 + 2	0.008 + 3	0.009 + 3
300 kΩ	1 Ω	50 µA	0.014 + 2	0.024 + 3	0.026 + 3
3 MΩ	10 Ω	5 µA	0.002 + 2	0.03 + 3	0.03 + 3
30 MΩ	100 Ω	0.5 µA	0.1 + 5	0.12 + 5	0.12 + 5
300 MΩ	1 kΩ	0.5 µA	2.0 + 5	2.0 + 5	2.0 + 5

¹For 4½-digit accuracy, count error is 5 (except 15 on 300Ω range).²4-wire accuracy, 3000-30kΩ ranges.³When properly zeroed.⁴Relative to calibration standards.

CONFIGURATION: Automatic 2- or 4-wire.

MAXIMUM ALLOWABLE INPUT: 300V rms or 425V peak, whichever is less.

OPEN CIRCUIT VOLTAGE: <5.5V.

TRMS AC VOLTS (5½ Digits)

RANGE	RESOLUTION	INPUT	ACCURACY ¹ ±(%rdg + counts) 1 Year, 18°-28°C			
			20 Hz	50 Hz	200 Hz	20 kHz
			-50 Hz ²	-200 Hz ²	-20 kHz ²	-100 kHz ²
300 mV	1 µV	2 + 100	0.35 + 100	0.15 + 200	2.0 + 300	
3 V	10 µV	2 + 100	0.35 + 100	0.15 + 200	1.5 + 300	
30 V	100 µV	2 + 100	0.35 + 100	0.15 + 200	1.5 + 300	
300 V	1 mV	2 + 100	0.35 + 100	0.15 + 200	1.5 + 300	

¹For 4½-digit accuracy, divide count error by 10; 4½-digit specifications apply for inputs >200Hz.²Sinewave inputs >2000 counts.³Sinewave inputs >20,000 counts.

RESPONSE: True root mean square, ac coupled.

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

NON-SINUSOIDAL INPUTS (>20,000 counts):

For rectified sine wave, add 0.3% of reading to above specifications for fundamental frequencies <20kHz.

For pulse waveforms, add 0.3% of reading for fundamental frequencies <1kHz, or 3.5% for frequencies <10kHz.

INPUT IMPEDANCE: 1MΩ shunted by <100pF.

MAXIMUM ALLOWABLE INPUT: 300V rms or 425V peak, 10⁷V·Hz, whichever is less.

CMRR: >60dB at 50Hz or 60Hz (±0.05%) with 1kΩ in either lead.

SETTLING TIME: 1 second to within 0.1% of change in reading.

INPUT	RESOLUTION	ACCURACY ±dB 1 Year, 18°-28°C	
		20 Hz-20 kHz	20 kHz-100 kHz
		dB (ref = 1V):	
-34 to +49 dB (20 mV to 300 V)	0.01 dB	0.2	0.4
-54 to -34 dB (2 mV to 20 mV)	0.01 dB	1.1	—

DC AMPS (5½ Digits)

RANGE	RESOLUTION	ACCURACY ¹ ±(%rdg + counts)		MAXIMUM VOLTAGE BURDEN
		1 Year, 18°-28°C	MAXIMUM VOLTAGE BURDEN	
30 mA	100 nA	0.05 + 15	0.4 V	
3 A	10 µA	0.1 + 15	2 V	

¹For 4½-digit accuracy, count error is 20.

MAXIMUM ALLOWABLE INPUT: 3A. Protected with 3A, 250V fuse accessible from front panel.

TRMS AC AMPS (5½ Digits)

RANGE	RESOLUTION	INPUT	ACCURACY ¹ ±(%rdg + counts)		MAXIMUM VOLTAGE BURDEN
			20 Hz-45 Hz	45 Hz-10 kHz	
			1 Year, 18°-28°C		
30 mA	100 nA	2 + 100	0.6 + 100	0.4 V	
3 A	10 µA	2 + 100	0.6 + 100	2 V	

¹Inputs >2000 counts. For 4½-digit accuracy, divide count error by 10; 4½-digit specifications apply for inputs >200Hz.

RESPONSE: True root mean square, ac coupled.

CREST FACTOR (ratio of peak to rms): Up to 3:1 allowable at ½ full range.

NON-SINUSOIDAL INPUTS: Specified accuracy for fundamental frequencies <1kHz.

MAXIMUM ALLOWABLE INPUT: 3A. Protected with 3A, 250V fuse accessible from front panel.

SETTLING TIME: 1 second to within 0.1% of final reading.

INPUT	RESOLUTION	ACCURACY ±dB 1 Year, 18°-28°C	
		dB (ref = 1mA):	
		20 Hz-10 kHz	
-14 to +69 dB (200 µA to 3 A)	0.01 dB	0.6	