

1-3. Specifications

Instrument specifications are presented in Table 1-1.

Table 1-1. Specifications

Function	Range	Resolution	Accuracy		
\bar{V}	3.200 V	0.001 V	$\pm(0.1\%+1)$		
	32.00 V	0.01 V	$\pm(0.1\%+1)$		
	320.0 V	0.1 V	$\pm(0.1\%+1)$		
	1000 V	1 V	$\pm(0.1\%+1)$		
\overline{mV}	320.0 mV	0.1 mV	$\pm(0.1\%+1)$		
Ω (nS)	320.00 Ω	0.1 Ω	$\pm(0.3\%+3)^*$		
	3.200 k Ω	0.001 k Ω	$\pm(0.2\%+1)$		
	32.00 k Ω	0.01 k Ω	$\pm(0.2\%+1)$		
	320.0 k Ω	0.1 k Ω	$\pm(0.2\%+1)$		
	3.200 M Ω	0.001 M Ω	$\pm(0.2\%+1)$		
	32.00 M Ω 32.00 nS	0.01 M Ω 0.01 nS	$\pm(1\%+1)$ $\pm(0.2\%+10)$		
\overline{I}	2.080 V	0.001 V	$\pm(1\%+1)$ typical		
\tilde{V}	3.200 V 32.00 V 320.0 V 1000 V	0.001 V 0.01 V 0.1 V 1 V	40 Hz-2 kHz	2 kHz -10 kHz	10 kHz -30 kHz
			$\pm(0.5\%+3)$	$\pm(2\%+3)$	$\pm(4\%+10)$
			$\pm(0.5\%+3)$	$\pm(2\%+3)$	$\pm(4\%+10)$
			$\pm(0.5\%+3)$	$\pm(2\%+3)$	$\pm(4\%+10)$
\tilde{mV}	320.0 mV	0.1 mV	$\pm(0.5\%+3)$	$\pm(2\%+3)$	$\pm(4\%+10)$
					Not Specified

* When using the REL Δ function to compensate for offsets.

Function	Range	Resolution	Accuracy	Typical Burden Voltage
$\overline{mA/A}$	32.00 mA	0.01 mA	$\pm(0.75\%+2)$	5.6 mV/mA
	320.0 mA	0.1 mA	$\pm(0.75\%+2)$	5.6 mV/mA
	10.00 A	0.01 A	$\pm(0.75\%+2)$	50 mV/A
$\overline{\mu A}$	320.0 μA	0.1 μA	$\pm(0.75\%+2)$	0.5 mV/ μA
	3200 μA	1 μA	$\pm(0.75\%+2)$	0.5 mV/ μA
$\sim mA/A$ 40-1000 Hz	32.00 mA	0.01 mA	$\pm(1.5\%+2)$	5.6 mV/mA
	320.0 mA	0.1 mA	$\pm(1.5\%+2)$	5.6 mV/mA
	10.00 A	0.01 A	$\pm(1.5\%+2)$	50 mV/A
$\sim \mu A$ 40-1000 Hz	320.0 μA	0.1 μA	$\pm(1.5\%+2)$	0.5 mV/ μA
	3200 μA	1 μA	$\pm(1.5\%+2)$	0.5 mV/ μA

Table 1-1. Specifications (cont)

Function	Overload Protection**	Input Impedance (nominal)	Common Mode Rejection Ratio (1 k Ω unbalance)	Normal Mode Rejection
\bar{V}	1000 V rms	10 M Ω in // with <100pF	>120 dB at dc, 50 Hz, or 60 Hz	>60 dB at 50 Hz or 60 Hz
\bar{mV}	1000 V rms	10 M Ω in // with <100pF	>120 dB at dc, 50 Hz, or 60 Hz	>60 dB at 50 Hz or 60 Hz
\hat{V}	1000 V rms	10 M Ω in // with <100pF (ac coupled)	>60 dB, dc to 60 Hz	
\hat{mV}	1000 V rms	10 M Ω in // with <100pF (ac coupled)	>60 dB, dc to 60 Hz	
Ω	1000 V rms	Open Circuit Test Voltage	Full Scale Voltage	
		<2.8 V dc	Up to 3.2 M Ω	32 M Ω or nS
			<420 mV dc	<1.3 V dc
<p>** 10⁷ V Hz Max</p> <p>Basic electrical accuracy is specified from 18°C to 28°C with relative humidity up to 95%, for a period of one year after calibration. All ac conversions are ac coupled, average responding, and calibrated to read the true rms value of a sine wave input. Accuracy is specified as \pm([% of reading] + [number of least significant digits]).</p> <p>Ranging is either automatic or manual in all functions with more than one range. Test resistance below approximately 270 Ω in the Ω function produces a continuous audible tone.</p>				
Maximum voltage between any terminal and earth ground		1000 V		
Fuse protection mA or μA		44/100 A 1000 V Fast 11 A 1000 V Fast		
Digital Display		3200 counts, updates 2/sec		
Analog Display		31 segments, updates 25/sec		
Operating Temperature		-15°C to 55°C, to -40°C for 20 minutes when taken from 20°C		
Storage Temperature		-55°C to 85°C without battery, to 60°C with battery		
Electromagnetic Compatibility		In an RF field of 2 V/m on all ranges and functions (except mVac), total accuracy = specified accuracy + 1.0% or range. For mVac, total accuracy = specified accuracy + 1.5% or range. EN 61326-1:1997.		
Temperature Coefficient		0.1 x (specified accuracy)/°C (18°C or >28°C)		
Relative Humidity		0% to 95% (0°C to 35°C) 0% to 70% (35°C to 55°C)		
Altitude		2000 meters		
Battery Type		9 V, NEDA 1604 or 6F22 or 006P		
Battery Life		1000 hrs typical		
Shock, Vibration and Water Resistance		Per MIL-T-28800 for a Style A, Class 2 Instrument		
Size (HxWxL)		2.2 in x 3.75 in x 8 in (5.6 cm x 9.5 cm x 20.3 cm)		
Weight		1.6 pounds (0.75 kg)		
Waterproof		1 meter		
Safety		Complies with ANSI/ISA S82.01-1994, CAN/CSA 22.2 NO. 1010.1:1992 to 1000 V Overvoltage Category III. UL License pending to UL3111-1. TUV License pending to EN61010-1.		