

SECTION II SPECIFICATIONS



2-1. General

This section contains accuracy, operating and environmental specifications for the Models 2100, 2101, 2101L and 2101-20mA.

2-2. Range and Resolution Tables

Model 2100

V O L T A G E	CURRENT RANGES			
		.2000 amps	2.000 amps	20.00 amps
	150.00 volts	30.00 watts	300.0 watts	3000 watts
	300.0 volts	60.00 watts	600.0 watts	6000 watts
	600.0 volts	120.00 watts	1200.0 watts	12000 watts
	WATTS			

Model 2101

V O L T A G E	CURRENT RANGES			
		.2000 amps	2.000 amps	20.00 amps
	30.00 volts	6.000 watts	60.00 watts	600.0 watts
	150.0 volts	30.00 watts	300.0 watts	3000 watts
	300.0 volts	60.00 watts	600.0 watts	6000 watts
	WATTS			

Model 2101-20mA

V O L T A G E	CURRENT RANGES			
		20.00 milliamps	.2000 amps	2.000 amps
	30.00 volts	.6000 watts	6.000 watts	60.00 watts
	150.0 volts	3.000 watts	30.00 watts	300.0 watts
	300.0 volts	6.000 watts	60.00 watts	600.0 watts
	WATTS			

Model 2101L

CURRENT RANGES				
V O L T A G E		.2000 amps	2.000 amps	20.00 amps
	1.5000 volts	.3000 watts	3.000 watts	30.00 watts
	15.000 volts	3.000 watts	30.00 watts	300.0 watts
	30.00 volts	6.000 watts	60.00 watts	600.0 watts
		WATTS		

Accuracies

Specified accuracies are valid for a period of 1 year from the date of calibration at 25°C ±5°C, following a 30 minute warm-up.

Voltage - AC+DC, DC Coupled

DC and 40Hz - 5kHz: ±0.1% of reading ±6 digits
 5kHz - 10kHz: ±0.5% of reading ±0.5% of range
 10kHz - 20kHz: ±1% of reading ±1% of range
 (Useable above 20kHz to 50kHz with typically an additional 1% error per 10kHz)

Current - AC+DC, DC Coupled

DC and 40Hz - 5kHz: ±0.1% of reading ±6 digits
 5kHz - 10kHz: ±0.5% of reading ±0.5% of range
 10kHz - 20kHz: ±1% of reading ±1% of range (2 Amp maximum)
 (Useable above 20kHz to 50kHz with typically an additional 1% error per 10kHz)

Watts - True Power (E_rcosφ)

DC and 40Hz - 5kHz: ±0.25% of reading ±6 digits
 5kHz - 10kHz: ±0.5% of reading ±0.5% of range
 10kHz - 20kHz: ±1% of reading ±1% of range (2 Amp maximum)
 (Useable above 20kHz to 50kHz with typically an additional 1% error per 10kHz)

Operating Specifications

Crest Factor Response: 50:1 for minimum RMS input, linearly decreasing to 2.5:1 for full scale RMS input

Minimum Inputs: 5% of voltage and current ranges for specified accuracies

Maximum Voltage Input: Models 2100, 2101, 2101-20mA = 600VDC or RMS, ±1500V_{PEAK}
 (without damage) Model 2101L = 30VDC or AC_{RMS} ±60V_{PEAK}



Maximum Current Input: Models 2100, 2101, 2101L = $\pm 35A_{PEAK}$, 20ADC or RMS continuous; 100ADC or RMS for 16 milliseconds without damage

Model 2101-20mA = $\pm 3.5A_{PEAK}$, 2ADC or RMS continuous; 5ADC or RMS for 16 milliseconds without damage

Voltage Input Impedance: Models 2100, 2101, 2101-20mA = $600k\Omega$
Model 2101L = $45k\Omega$

Current Shunt Impedance: Models 2100, 2101, 2101L = $.01\Omega$
Model 2101-20mA = 0.1Ω

Max Common Mode: $\pm 1500V$ peak, neutral to earth

Peak Indicators: Illuminate at 2.5 x full scale for voltage and current

Overrange: 150% of full scale for DC, up to "maximum input" specification

2-5. Environmental and Physical Specifications

Temperature Range: $0^{\circ}C$ to $50^{\circ}C$ operating; $-20^{\circ}C$ to $70^{\circ}C$ storage

Temperature Coefficient: $\pm 0.025\%$ of range per $^{\circ}C$ from $0^{\circ}C$ - $20^{\circ}C$ and $30^{\circ}C$ - $50^{\circ}C$

Power Consumption: 105-125VAC or 210-250VAC, 50-400Hz; 25VA maximum

Dimensions: 25cm W x 27cm D x 8cm H (10" W x 10.5" D x 3" H)

Weights: 1.7kg (3.5 lbs) net; 3kg (6 lbs) shipping

Source/Load Connections: 4-terminal heavy-duty input jacks

