

2110A-2111A SPECIFICATIONS

1. General

This section contains accuracy, operating and environmental specifications for the Models 2110A, 2111A, and 2111A-20mA.

2. Range and Resolution Tables

Model 2110A

CURRENT RANGES			
	.2000 A	2.000 A	20.00 A
150.00 V	30.00 W	300.0 W	3000 W
300.0 V	60.00 W	600.0 W	6000 W
600.0 V	120.00 W	1200.0 W	12000 W
	WATTS		

Model 2111A

CURRENT RANGES			
	.2000 A	2.000 A	20.00 A
30.00 V	6.000 W	60.00 W	600.0 W
150.0 V	30.00 W	300.0 W	3000 W
300.0 V	60.00 W	600.0 W	6000 W
	WATTS		

Model 2111A-20mA

CURRENT RANGES			
	20.00 mA	.2000 A	2.000 A
30.00 V	6.000 W	6.000 W	60.00 W
150.0 V	3.000 W	30.00 W	300.0 W
300.0 V	6.000 W	60.00 W	600.0 W
	WATTS		

3. 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 - 15kHz: ±0.5% of reading ±6 digits
 15kHz - 20kHz: ±0.75% of reading ±6 digits
 (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 - 15kHz: ±0.5% of reading ±6 digits
 15kHz - 20kHz: ±0.75% of reading ±6 digits
 (Useable above 20kHz to 50kHz with typically an additional 1% error per 10kHz)

Watts - True Power (EI-cosφ)

DC and 40Hz - 5kHz: $\pm 0.25\%$ of reading ± 6 digits
 5kHz - 10kHz: $\pm 0.5\%$ of reading ± 6 digits
 10kHz - 20kHz: $\pm 1\%$ of reading $\pm 1\%$ of range ± 6 digits (2A maximum input current)

(Useable above 20kHz to 50kHz with typically an additional 1% error per 10kHz)

Power Factor - (W÷VA)

Response: Unity to zero, leading or lagging
 Resolution: .001 PF (1000 counts)

Accuracy (for inputs > 10% of selected voltage and current ranges):

DC and 40Hz - 1kHz: ± 5 counts
 1kHz - 5kHz: ± 10 counts
 5kHz - bandwidth: ± 50 counts

4. 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: 600VDC or RMS, ± 1500 VPEAK (without damage)

Maximum Current Input: *Models 2110A and 2111A* = ± 35 APEAK, 20ADC or RMS continuous; 100ADC or RMS for 16 milliseconds without damage

Model 2111A-20mA = ± 3.5 APEAK, 2ADC or RMS continuous; 5ADC or RMS for 16 milliseconds without damage

Voltage Input Impedance: 600k Ω

Current Shunt Impedance: *Models 2110A and 2111A* = .01 Ω

Model 2111A-20mA = 0.1 Ω

Max Common Mode: ± 1500 V 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 above

2-5. Environmental and Physical Specifications

Temperature Range: 0°C to 50°C operating; -20°C to 70°C storage

Temperature Coefficient: $\pm 0.025\%$ of range per °C from 0°C-20°C and 30°C-50°C

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

Dimensions: 25cm W x 27cm D x 10cm H (10" W x 10.5" D x 4" H)

Weights: 2.2kg (4.5 lbs) net, 4kg (8 lbs) shipping

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