Low Cost Wide Range Power Analyzer

Accurate, Reliable Low-Cost Power Measurements

- Up to 20A/phase Direct (Self Contained Shunt 0.1%)
- Expandable to 1000 amps (optional, see I-1000 C.T.)
- True Power Measurements, VI cos Ø
- High Accuracy Measurement: 0.15% DC to 5KHz
- Bandwidth~ DC, 40 Hz to 50 KHz
- Zero to Unity Power Factor Response
- Accurate Regardless of Waveform Distortion
- Certificate of N.I.S.T. traceability

Valhalla Scientific Model 2105 is accurate, reliable low-cost power measurement devices designed to aid engineering, production test, and quality assurance departments in determination of product power consumption from DC and AC power sources. The instruments feature dual independent digital displays. The left display provides a continuous indication of true power in watts. The right display is switch selectable between amperes (true RMS) or volts (true RMS).

The Model 2105 provides a fast and convenient method of determining product efficiency, power factor, and true RMS current draw. Phase angle relationships may be calculated through manipulation of the displayed quantities. The design of these models permits them to make accurate power measurements even in the most difficult applications. Switching mode power supplies, SCR controlled circuits and pulsed DC devices are just a few of the applications requiring the true power measurement capability of the Valhalla 2105 Power Analyzer.

A quick and easy way to connect our load to the 2105 is via the “X-21” Load Extension Cord. Approximately three feet in length for each half, this convenient adaptor cord plugs directly into a standard 115V AC power outlet and mates with the 2105 via heavy duty banana jacks.

### Range Specifications

<table>
<thead>
<tr>
<th>Voltage Range</th>
<th>.2000A</th>
<th>2.000A</th>
<th>20.00A</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.00V</td>
<td>6.000W</td>
<td>60.00W</td>
<td>600.0W</td>
</tr>
<tr>
<td>150.00V</td>
<td>30.00W</td>
<td>300.0W</td>
<td>3000W</td>
</tr>
<tr>
<td>300.0V</td>
<td>60.00W</td>
<td>600.0W</td>
<td>6000W</td>
</tr>
<tr>
<td>600.0V</td>
<td>120.00W</td>
<td>1200.0W</td>
<td>12000W</td>
</tr>
</tbody>
</table>

### Accuracies

<table>
<thead>
<tr>
<th>Voltage → AC+DC, DC Coupled</th>
<th>DC &amp; 40Hz → 5kHz</th>
<th>5kHz – 10kHz (12A Max)</th>
<th>10kHz – 20kHz (2A Max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>±0.1% of rdg ±6</td>
<td>±0.5% of rdg ±0.5% of rng</td>
<td>±1% of rdg ±1% of rng</td>
<td></td>
</tr>
<tr>
<td>Current → AC+DC, DC Coupled</td>
<td>±0.1% of rdg ±6</td>
<td>±0.5% of rdg ±0.5% of rng</td>
<td>±1% of rdg ±1% of rng</td>
</tr>
<tr>
<td>Watts → AC+DC, DC Coupled</td>
<td>±0.25% of rdg ±6</td>
<td>±0.5% of rdg ±0.5% of rng</td>
<td>±1% of rdg ±1% of rng</td>
</tr>
</tbody>
</table>

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

### General Specifications

- Crest Factor Response:
- Minimum Inputs:
- Maximum Voltage Input (without damage):
- Voltage Impedance:
- Current Shunt Impedance:
- Max Common Mode:
- Peak Indicators:
- Over-range:
- Temperature Coefficient:
- Source/Load Connections:

### Power

- Power Requirements:
- Temperature
- Operating Temp. Range:
- Humidity

### Physical Specifications

- Size:
- Weight:

### Accessories

<table>
<thead>
<tr>
<th>I-100</th>
<th>HCC</th>
<th>Pelican 1500 Hard Carrying Case with Custom Foam for the meter, battery charger, up to 3 sets of leads and extra batteries.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-21</td>
<td></td>
<td>100A Clamp - 100:1 ratio is 2% acc. 45Hz-1kHz. For 2&quot; dia. Wire. It allows for quick and easy connection and testing of loads that use a standard AC plug. 6 feet in length, up to 20 amperes.</td>
</tr>
<tr>
<td>R4</td>
<td></td>
<td>19&quot; Rack Mount Adaptor</td>
</tr>
</tbody>
</table>