For PW6001/3390/3390-10 POWER ANALYZERS

New wideband high-accuracy current measurement option

The optimal device for testing inverters

The newly developed DCCT method provides world-leading measurement bands and accuracy at a 50 A rating. Delivering a direct-coupled type current testing tool that brings out the PW6001 POWER ANALYZER’s maximum potential.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Measurement frequency band</th>
<th>Power accuracy in combination with PW6001</th>
<th>CMRR (100 kHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50Arms DC ±50A</td>
<td>DC to 3.5 MHz</td>
<td>±0.04% *</td>
<td>120 dB</td>
</tr>
</tbody>
</table>

High consistency and noise resistance for definitive testing of inverters

Wiring connection example 1 – Existing direct-input connection method

For more reliable wideband high-accuracy measurements. The existing direct-input type power meter can be replaced easily. Use two PW9100-03 devices (the 3ch models) for 6-channel measurements.

Wiring connection example 2 – Introducing a new and innovative measuring method

Shorten the wiring for current measurement by installing the PW9100 close to the measurement target. This will also keep the effects of wiring resistance, capacity coupling and other objective factors on the measured values to a minimum.

* Requires CT9902 EXTENSION CABLE

* For complete details, please refer to the specifications.
**Specifications**

**Current and power measurement accuracy**

(Combined accuracy of a PW9100 AC/DC CURRENT BOX and a PW6001 POWER ANALYZER)

**Frequency**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Current measurement accuracy</th>
<th>DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC</td>
<td>±0.04% rdg ±0.07% f.s. (f.s. = PW6001 Range)</td>
<td></td>
</tr>
<tr>
<td>45 Hz ≤ f ≤ 65 Hz</td>
<td>±0.04% rdg ±0.025% f.s. (f.s. = PW6001 Range)</td>
<td></td>
</tr>
<tr>
<td>Other bandwidths</td>
<td>PW6001 accuracy + PW9100 accuracy (Consider sensor rating when calculating f.s. error.)</td>
<td></td>
</tr>
</tbody>
</table>

**Frequency range**

- 700 kHz < f ≤ 1 MHz ±10% rdg ±0.05% f.s. ±(0.07*f) deg.
- 300 kHz < f ≤ 700 kHz ±0.1% rdg ±0.02% f.s. ±0.1 deg.
- 500 Hz < f ≤ 1 kHz ±0.1% rdg ±0.01% f.s. ±0.5 deg.
- 1 kHz < f ≤ 5 kHz ±0.5% rdg ±0.02% f.s. ±0.5 deg.
- 5 kHz < f ≤ 20 kHz ±1% rdg ±0.02% f.s. ±0.5 deg.
- 10 kHz < f ≤ 20 kHz ±0.01% rdg ±0.01% f.s. ±0.5 deg.
- 20 kHz ≤ f ≤ 100 kHz ±2% rdg ±0.05% f.s. ±(0.07*f) deg.
- 100 kHz ≤ f ≤ 500 kHz ±2% rdg ±0.05% f.s. ±(0.07*f) deg.
- 500 kHz ≤ f ≤ 1 MHz ±1% rdg ±0.02% f.s. ±0.1 deg.

**Accuracy guaranteed for 1 year, Post-adjustment accuracy guaranteed for 1 year**

**Input method** Isolated input, DCCT input

**Rated primary current** 50 A AC/DC

**Number of input channels** PW9100-03: 3 channels, PW9100-04: 4 channels

**Maximum input current** Within derating. However, up to 200 A peak is allowable if within 20 ms (design value).

**Output voltage** 2 V/50 A

**Maximum rated voltage to ground** 1000 V (measurement category II), 600 V (measurement category III), anticipated transient overvoltage: 5000 V

**Measurement terminals** terminal block (with safety cover), M4 screws

**Input resistance** 1.5 MΩ or less (50 Hz/60 Hz)

**Input capacitance** Between measurement terminals and case (secondary side), 40 pF or less, defined at 10 kHz

**General specifications**

- Operating environment Indoors, pollution degree 2, altitude up to 2000 m (6562.20 ft)
- Operating temperature and humidity Temperature: 0°C to 40°C (32°F to 104°F), Humidity: 80% RH or less (no condensation)
- Storage temperature Temperature: -10°C to 50°C (14°F to 122°F), Humidity: 80% RH or less (no condensation)
- Compliance standard Safety: EN 61010-2-030:2010; EMC: EN 61326-1:2013 Class A
- Dielectric strength 5.4 kV AC (tangent of current 1 mA), 50 Hz/60 Hz, 1 min
- Between the input terminal, the cable output terminal and the case
- Between channels
- Power supply Power supply from PW6001, 3390, 3390-10
- Interface Dedicated interface (ME15W)
- Dimensions 430 mm (16.93 in) W × 88 mm (3.46 in) H × 260 mm (10.24 in) D
- Output cable length 0.8 m (2.62 ft)
- Mass PW9100-03: 3.7 kg (130.5 oz), PW9100-04: 4.2 kg (151.7 oz)
- Product warranty period 1 year
- Accessories Instruction manual

**DERATING AND GUARANTEE RANGE**

<table>
<thead>
<tr>
<th>Current [A]</th>
<th>Power supply 0.1 V or less</th>
<th>Power supply &gt;0.1 V</th>
<th>Frequency [Hz]</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC</td>
<td></td>
<td></td>
<td>1 kHz</td>
</tr>
<tr>
<td>DC</td>
<td></td>
<td></td>
<td>10 kHz</td>
</tr>
<tr>
<td>DC</td>
<td></td>
<td></td>
<td>50 kHz</td>
</tr>
<tr>
<td>DC</td>
<td></td>
<td></td>
<td>100 kHz</td>
</tr>
<tr>
<td>DC</td>
<td></td>
<td></td>
<td>500 kHz</td>
</tr>
<tr>
<td>DC</td>
<td></td>
<td></td>
<td>1 MHz</td>
</tr>
<tr>
<td>DC</td>
<td></td>
<td></td>
<td>3 MHz</td>
</tr>
<tr>
<td>DC</td>
<td></td>
<td></td>
<td>6 MHz</td>
</tr>
<tr>
<td>DC</td>
<td></td>
<td></td>
<td>10 MHz</td>
</tr>
</tbody>
</table>

**Options**

- 100% Accuracy**
- PW9100-01 5ch
- PW9100-02 6ch

**PW9100-03: 3ch PW9100-04: 4ch

**EXTRACTION CABLE**

CT9902

- 2 or more extension cables cannot be combined for use.

**Rock mount hardware** Made-to-order, for EIA/JIS

**POWER ANALYZERS** 3390/3390-10 also support the PW9100.

- All information correct as of Dec. 18, 2015. All specifications are subject to change without notice.

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