CWT MiniHF  NEW

- New model featuring

- A novel electrostatic shielded Rogowski coil providing excellent immunity to interference from fast local dV/dt transients or large 50/60Hz voltages
- Extended (-3dB) high frequency bandwidth
  30MHz for a 100mm coil
- Peak di/dt capability up to 100kA/µs
- Wide operating temperature from -40°C to +125°C
- 4.5mm thick Rogowski coil with 5kV peak insulation.

Rogowski benefits
Both versions offer the advantages of a CWT Rogowski probe, including:
- simple to use and easy to insert into difficult to reach parts of the circuit
- practically zero insertion impedance
- freedom from flying leads
- isolated measurement
- peak-current ratings from 30A to 300kA
- ±6V into 1MΩ and now with 50Ω drive capability

Applications
- Semiconductor switching waveforms (device loss)
- Measuring high frequency sinusoidal, pulsed or transient currents from power frequency to rf applications
- Power converter development and diagnostics for example:
  - MOSFET/IGBT devices as small as TO-247 or around the terminals of large power modules
  - monitoring currents in small inductors, capacitors, snubber circuits, etc
- Measuring small AC currents in the presence of large DC currents (e.g. monitoring capacitor ripple)
- Measuring current in motor drives and in particular power quality measurements in VSD, UPS or SMPS circuits

CWT Mini  NEW

- Improvements to the existing range

- Extended (-3dB) low frequency bandwidth typically less than 1Hz
- Extended (-3dB) high frequency bandwidth
  up to 20MHz for a 100mm coil
- Improved peak di/dt up to 40kA/µs
- 3.5mm thickness with 2kVpeak, and 4.5mm thickness with 5kVpeak insulation coils

5kV CWT MiniHF coil through the legs of a TO-247 device

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Performance

Output

- ±6V peak corresponding to ‘Peak Current’ into ≥ 100kΩ (e.g. DC1MΩ oscilloscope)
- ±3V peak corresponding to ‘Peak Current’ into      = 50Ω (for long cable runs > 2m)

Accuracy

- Conductor position in the coil (for a 2mm² conductor) typically ±2% reading
- Linearity (with current magnitude)                             0.05% reading

Calibration

- Calibrated to ±0.2% reading with conductor central in the coil loop

DC offset

- ±3mV at 25°C

Temperature

- Coil and cable                   -40°C to +125°C               - (CWT MiniHF)
- Integrator                        0 to +40°C
- Cable length 1, 2.5 or 4m – length of cable from coil to electronics larger cables available on request

Di/dt ratings

<table>
<thead>
<tr>
<th>Type</th>
<th>Abs. Max. peak di/dt</th>
<th>Abs. Max. rms di/dt</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWT MiniHF</td>
<td>100kA/µs</td>
<td>1.26kA/µs</td>
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<tr>
<td>CWT Mini</td>
<td>40kA/µs</td>
<td>1.0kA/µs</td>
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</tbody>
</table>

Power

- Options:
  - B: Standard: 4 x AA 1.5V alkaline batteries. Lifetime 25 hours. External adaptor disconnects batteries and power unit.
  - R: Rechargeable: 4 x AA 1.2V NiMH batteries. Lifetime 10 hours. External adaptor recharges batteries and powers unit.

External power adapter - US, EURO, UK versions available.

Generating the part code

<table>
<thead>
<tr>
<th>Model</th>
<th>Power option</th>
<th>1, 2.5 or 4</th>
<th>Cable length (m)</th>
<th>Insulation (kV)</th>
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</thead>
<tbody>
<tr>
<td>CWT MiniHF 06</td>
<td>R</td>
<td>/</td>
<td>/</td>
<td>30</td>
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<td>CWT MiniHF 03</td>
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If you have any queries regarding the CWT Mini range or require specifications outside our standard ranges please contact us.

www.pemuk.com
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