CMI165

Copper Thickness Measurement with Temperature Compensation

Oxford Instruments **CMI**165 provides unique temperature compensated Copper thickness measurements in an ergonomic hand-held device. Measurements on Copper are affected by the temperature of the sample. The **CMI**165 accounts for temperature in the measurement of thickness ensuring accurate in-process inspection results regardless of Copper temperature. This versatile, portable gauge equipped with protective case, has a rugged and durable design that allows it to be taken into the harshest environments.

- Measure hot or cold Cu on PCBs
- Reduce waste by eliminating the need for coupons
- Measure foil or laminated Cu thickness in µm, mils or oz
- Sort Cu by weight at incoming inspection, before drilling, shearing or plating
- Quantify Cu thickness after etching or planarizing
- Verify Cu plating thickness on PCB surfaces

The Business of Science®

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Proprietary SRP-T1 measurement probe

User Interface available in both English and Simplified Chinese

- SRP-T1 Replaceable Probe Tip – no recalibration necessary
- Spare SRP-T1 ensures no factory downtime
- Illuminated probe tip for easy positioning on copper traces

Specifications:

- Copper thickness is measured using 4-point probe electrical resistance method and conforms to standard EN 14571.
- Thickness measurement ranges
  - Copper Electroless: (0.25-12.7) µm, (0.01-0.5) mils
  - Copper Electrodeposited: (2.0-254) µm, (0.1-10) mils
- High repeatability and reliability: $\sigma \approx 0.08$ µm at 20 µm (0.003 mils at 0.79 mils)
- Statistical analysis includes data recording, average, standard deviation and high-low reporting
- Measurement units in µm, mils or oz
- User interface in English or Simplified Chinese
- Measure etched traces as thin as 0.2 µm (0.008 mils) without line width standards
- Store 9,690 measurements (with optional date and time stamp)
- USB 2.0 high-speed data transfer interfaced with Microsoft Excel™
- Factory calibrated and certified
- Customizable for other applications
- Static or continuous mode measurement
- Powered by regular AA batteries

Click onto **www.oxford-instruments.com** for more information

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