



CMI165®

Unique temperature-compensated surface and trace copper thickness



ACCURATE IN-PROCESS INSPECTION RESULTS REGARDLESS OF COPPER TEMPERATURE

Temperature can affect the measurement on a copper sample. Our CMI165® can compensate for the temperature to produce accurate in-process inspection results regardless of the temperature of the copper. It is an ideal gauge for quality assurance and inspection for:

- PCM manufacturing and assembly.
- Copper surface thickness.

Our CMI165® gauge is versatile and portable. It comes equipped with a protective case and its durable design can be taken into the harshest environments. The CMI165® is a good choice to:

- Measure Cu on hot or cold PCBs.
- Reduce waste by eliminating the need for coupons.
- Measure Cu thickness on foils or laminates in µm, mils or oz.
- Sort Cu by weight at incoming inspection, prior to drilling, shearing or plating.
- Quantify Cu thickness after etching or planarizing.
- Verify Cu plating thickness on PCB surfaces.
- Measure thin etched traces down to 204 μm without use of standards.

KEY FEATURES:

- Temperature compensation.
- Durable design
- Proprietary SRP-T1 replaceable probe.
- Illuminated probe tip for easy positioning.
- User interface in English or Simplified Chinese.

RELIABLE
NON-DESTRUCTIVE
ANALYSIS
REGARDLESS OF Cu
TEMPERATURE



PROPRIETARY SRP-T1 MEASUREMENT PROBE

- Replaceable Probe Tip no recalibration necessary.
- Ensures no factory downtime.

SPECIFICATIONS

- 4-point electrical probe with resistance method to ensure compliane with EN 14571.
- High repeatability and reliability.
- Statistical analysis includes data recording, average, standard deviation and high-low reporting.
- Factory calibrated and certified.
- Customizable for specific applications.
- Static or continuous mode measurement.
- Powered by AA batteries.

PCB GAUGE COMPARISON CHART

We offer multiple choices for a PCB gauge within the PCB industry to provide you with the best and most cost-effective solution available for your application needs. Please reference the comparison chart below or contact us at **contact@hitachi-hightech.com** for our expert advice.

	CMI95M	CMI165	CMI511	CMI563	CMI760
Technique	Microresistance	Microresistance	Eddy	Microresistance	Microresistance
Copper Foil	•	•		•	•
Copper Laminate	•	•		•	•
Copper - Surface		•		•	•
Copper – Fine Line		•		•	•
Copper Thru-hole			•		Optional
Temperature Compensation		•	•		ETP Probe
Replacement Probe Tip		•		•	SRP-4 Probe
Unit Selection	oz or µm	mil or µm	mil or µm	mil or µm	mil or µm
Copper Thickness Range					
μm	8 indicator lights: 5-140	Electroless: 0.25-12.7 Electroplated: 2-254	2-102	Electroless: 0.25-12.7 Electroplated: 0.25-152	Surface: 0.25-254 Thru-hole: 1-10
mil		Electroless: 0.01-0.5 Electroplated: 0.1-10	0.08-4	Electroless: 0.01-0.5 Electroplated: 0.01-6	Surface: 0.01-10 Thru-hole: 0.08-4

Our global network of service hubs offer a full range of technical support to keep you up and running. We are A2LA certified* for coating thickness calibrations and standards which means that your CMI165® will be ISO complaint. *A2LA accreditation is applicable to work performed by Hitachi High-Tech Analytical Science America, Inc.



If you'd like to learn more about CMI165® gauge visit www.hitachi-hightech.com/hha or email one of our experts at contact@hitachi-hightech.com to book a demo.

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