

## CMI165®

Unique temperature-compensated surface and trace copper thickness

### Find out more

These gauges are a great complement to our XRF coatings analysers. To place your order contact [contact@hitachi-hightech-as.com](mailto:contact@hitachi-hightech-as.com)

### MORE INFORMATION

To find out more about the CMI165® or our range of PCB gauges, visit

[www.hitachi-hightech.com/hha](http://www.hitachi-hightech.com/hha)



## 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  $\mu\text{m}$ , 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  $\mu\text{m}$  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 compliance with EN 14571.
- High repeatability and reliability.
- Statistical analysis includes data recording, average, standard deviation and high-low reporting.
- Factory calibrated and certified.
- Customisable 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-as.com](mailto:contact@hitachi-hightech-as.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 $\mu\text{m}$	mil or $\mu\text{m}$	mil or $\mu\text{m}$	mil or $\mu\text{m}$	mil or $\mu\text{m}$
<b>Copper Thickness Range</b>					
$\mu\text{m}$	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 compliant.

\*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](http://www.hitachi-hightech.com/hha) or email one of our experts at [contact@hitachi-hightech-as.com](mailto:contact@hitachi-hightech-as.com) to book a demo.

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