



CMI760 Series®

Find out more

These gauges are a great complement to our XRF coatings analysers. To place your order contact contact@hitachi-hightech-as.com

MORE INFORMATION

To find out more about the CMI760 or our range of PCB gauges, visit

www.hitachi-hightech.com/hha



TEST FOIL, LAMINATE, SURFACE, TRACES AND THRU-HOLE COPPER WITH A SINGLE DEVICE

The CMI760® accepts multiple probe types to meet almost any PCB application, including surface copper, and through-hole applications.

Our CMI760® comes standard with the SRP-4 probe and an advanced statistical package for interpretation of test data. This instrument is highly-expandable, capable of both micro-resistance and eddy current testing for the accurate and precise measurement of copper. Optional accessories are available to measure thru-hole copper thickness.

SRP-4 PROBE

The CMI760® includes a tethered SRP-4 Probe with user-replaceable tips for added convenience and its more cost effective. This probe consists of four pins encased securely in a patented design for durability and resistance to breakage and wear. A see-through casing allows for easy placement of the probe on small traces. The tethered cable is ideal for field applications plus its small footprint is convenient and user-friendly.

OPTIONAL ETP PROBE

Using our ETP Probe the CMI760® operates with eddy current. This probe generates accurate readings regardless of the board's multiple layers, working equally well on double-sided and multilayer boards, before and after etch, even with tin and tin/lead resist. It also provides a temperature compensation feature, for measurement of the board immediately after it is lifted from the plating tank.

KEY FEATURES:

- Dual technology eddy current and microresistance.
- Surface and thru-hole probes.
- Active statistical display
- Optional foot switch.

VERSATILE DUAL TECHNOLOGY

GAUGE SPECIFICATIONS

- Dimensions: in : 11 1/2 (W) x 10 1/2 (D) x 5 1/2 (H) cm: 29.21 (W) x 26.67 (D) x 13.97 (H).
- Weight: 6 lbs. (2.7 kg).
- Unit: Select from mils, μm, μin, mm, in., or % as units for display.
- Display: Large LCD 480 (H) x 32 (V) pixels, backlit, wide-angle view.
- Statistical Display: Readings, standard deviation, mean, high/low.
- Charts: Histogram, trend, x-Bar, and r-chart.

SRP-4 PROBE:

- Accuracy: $\pm 1\%$ ($\pm 0.1 \mu m$) referred to reference standard.
- Precision: Electroless Copper: 0.2% typical.
- | Electrodeposited Copper: 0.3% typical.
- **Resolution:** mil: 0.01 at > 1, 0.001 at < 1.

 μm : 0.1 at > 10, 0.01 at < 10, 0.001 at <1.

ETP PROBE SPECIFICATIONS:

- **Accuracy:** ± 0.01 mil $(0.25 \mu m) < 1$ mil $(25 \mu m)$.
- Precision: 1.0% at 1.2 mil typical.
- Resolution: 0.01 mils (0.25 µm).
- Eddy Current: Conforms to method ASTM E376

Thickness Range: 0.08-4.0 mils (1-102 μm).

Minimum Hole Size: 35 mils (899 µm).

PCB 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** 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: 1-102
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 ensures that your CMI760® will be compliant at audit to ISO 17025.



*A2LA accreditation is applicable to work performed by Hitachi High-Tech Analytical Science America, Inc.

If you'd like to learn more about the CMI760® gauge visit www.hitachi-hightech.com/hha or email one of our experts at contact@hitachi-hightech-as.com to book a demo.

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 $\label{thm:likelihood} \mbox{Hitachi High-Tech Analytical Science acknowledges all trademarks and registrations}.$

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