

CMI760 Series®

Find out more

These gauges are a great complement to our XRF coatings analyzers. To place your order contact contact@hitachi-hightech.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 for through-hole measurements. 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 320 (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:** $\pm 1\%$ ($\pm 0.1 \mu\text{m}$) 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 ($0.25 \mu\text{m}$) < 1 mil ($25 \mu\text{m}$).
- Precision:** 1.0% at 1.2 mil typical.
- Resolution:** 0.01 mils ($0.25 \mu\text{m}$).
- Eddy Current:** Conforms to method ASTM E376
Thickness Range: 0.08-4.0 mils ($1-102 \mu\text{m}$).
- Minimum Hole Size:** 35 mils ($899 \mu\text{m}$).

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.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.com to book a demo.

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