Microderm™ CMS

Measuring Coatings and Platings has never been SO EASY

The World’s First Handheld Beta Backscatter Instrument

UPA Technology
www.upa.com
Precise Measurement of Coatings or Platings...
On the Process Line as a Handheld Instrument,
In the Quality Control Lab as a Benchtop Instrument
... or Both!

✔ A wide variety of probes and probe stands allows measurement on almost any size or shape of part

✔ Menu-driven, user-friendly software, and an easy-to-read backlit display

✔ Simple data transfer to computer via USB port

✔ Ergonomic instrument design for unmatched ease of use and efficiency

✔ Rechargeable NiMH batteries provide up to 20 hours of continuous measuring between recharges

✔ Recharging base also functions as a benchtop stand

Typical Applications Include:

- Adhesive / Steel, Aluminum, Glass
- Aluminum / Kovar, Steel, Glass, Silicon
- Aluminide / Nickel Alloys
- Babbitt / Bronze, Brass, Copper, Iron
- Copper / Aluminum, Beryllium, Carbon, Ceramic, Plastic
- Chromium / Copper, Aluminum
- Cadmium / Steel, Brass, Stainless Steel
- Electroless Nickel / Aluminum, Plastic
- Gold / Nickel, Copper, Silicon, Ceramic
- Iron Oxide / Mylar
- Lead / Brass, Bronze
- Lubricants / Steel, Aluminum, Brass, Copper
- Mylar Film Thickness
- Nickel / Aluminum, Beryllium
- Palladium / Nickel
- PhotoResist / Copper
- Platinum / Nickel
- Primer / Glass
- Rhodium / Nickel, Copper, Gold
- Silver / Copper, Nickel, Ceramic
- Silicon / Plastic
- Solder / Copper, Brass
- Tantalum / Glass
- Tin / Copper, Brass, Steel
- Tin-Nickel / Nickel
- Titanium Nitride / Steel, Stainless Steel

Microdern® Specifications:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>9.5” X 5.0” X 2.5” (250 mm x 125 mm x 62.5 cm)</th>
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<tbody>
<tr>
<td>Weight</td>
<td>1.5 lbs. (0.65 kg)</td>
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<tr>
<td>Display</td>
<td>2” X 2.4” (50mm x 60mm) backlit viewing area 320 x 240 pixels; 1/4 VGA</td>
</tr>
<tr>
<td>Memory</td>
<td>100 applications; 20 calibrations; 350,000 measurement storage</td>
</tr>
<tr>
<td>Statistics</td>
<td>Mean, standard deviation, max/min, and range</td>
</tr>
<tr>
<td>Data Port</td>
<td>9-Pin Serial to USB</td>
</tr>
<tr>
<td>Batteries</td>
<td>4 AA 2500 mAh NiMH rechargeable batteries</td>
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Microderm™ Probes and Probe Guides

The HH-3 and HH-2 are the most versatile Beta Backscatter probes available. These probes measure almost any size or shape part such as cylinders, sheet stock, windshields, electronics, and small parts.

Let UPA help you select the components best suited for your specific measurement applications.

SPG-1 Probe Guide
The SPG-1 guide positions the HH-3 probe on small parts such as electronic components. A pressure pin holds the part securely for measurement.

WF Probe Guide
The WF Probe guide is ideal for the aerospace, automotive or other industries that measure larger surface areas (windshields, plates, sheet stocks, etc.)

UMS Probe Stand
The UMS probe stand allows the HH-3 probe to be precisely lowered onto the part area to be measured. Parts fixtures may be attached to the base.

Other Probe Options

BTF Probe
Beta Thin Film “BTF” probes measure extremely thin wet or dry coatings such as stamping lubricants, primers, and adhesives on flat parts.

HH-4 Probe
The HH-4 (right angle) probe with an I.D. guide enables measurement of coatings and platings on the inner surface of tubing, bearings, rings, or cylinders.

PS 10-A Probe Table
The PS-10A table allows precise, instant alignment of very small parts and electronic components such as connectors, contacts, pins, and terminals.

Other specialized probes are also available. Contact UPA for details.
X-Ray Systems
Cost-effective, high-quality XRF instruments for measurement of plating thickness and alloy composition.

Portable Dermitron\textsuperscript{CMS}
Versatile eddy-current and magnetic instrument measures a large variety of coating applications, including: platings, paint, and anodizing. Measures plating on steel as accurately as X-ray and can be used on the process line or in the quality lab.

Couloderm
Destructive test method measures virtually any plating or substrate configuration including nickel and duplex nickel layers. Downloads data to computer or printer.

Caviderm
Measures PBC Copper thickness quickly and efficiently in thru-holes or on the surface.

Calibration Standards
UPA provides new thickness standards and recalibrates standards for all brands of coating/plating thickness measurement instruments.

Other Products and Services Available from UPA
- Equipment lease and rental options
- ISO 17025 accredited calibration of all brands of instruments and standards
- Instrument calibration at your facility --- or at ours with 1-2 day turnaround
- Used and reconditioned instrument sales --- call for availability
- Beta backscatter isotope leak testing, replacement, or disposal for all brands
- Contract measurement of your parts, by the piece or by the hour
- X-ray repair and calibration
- Applications and technical support

8963 Cincinnati-Columbus Rd.
West Chester, Ohio 45069
E-mail: info@upa.com  Phone 513.755.1380  Fax 513.755.1381

www.upa.com