Advanced Electrical Materials
MSPro14 Surface Profiler
Morgan MSPro14 - the new improved Surface Profiler not only can accurately measure and record surface conditions on commutators and slip rings but also offers:

- A solid easy to mount sensor that can be fitted to a vast range of holder sizes to cope with extreme environments including vibration
- Easy to use responsive industrial Touch Screen
- Optimised sensor head that can easily be used on Helical Groove Slip Rings
- Zero setting light indicators for easy set up
- Previous Morgan supplied profiler measurements can be stored and combined on MSPro14
- Extra large memory capacity for data storage and can be edited on the data acquisition box
- Comes in a robust carrying case including all attachments

All Inclusive - All you need to profile your commutator or slip ring

Included in the package is The MSPro14 in a robust lightweight case including:

- DASPro14 (Data Analysis Software)
- Sensor & clamp, sensor sleeve, and sensor spacer set
- Download cable
- AC power adaptor
- G Clamp
- Flashlight & pen
Direct Data collation and storage
The measurement tablet is easy to use with:-
- Responsive touch screen
- Encased in a robust housing
- Capability for analysing at the point of measurement
- Software capable of uploading previous profiler data supplied by Morgan
- Can be used with any PC via USB
- Energy saving automatic sleep mode

Versatile to suit a variety of applications
From steel mill motors to wind turbine slip rings the MSPro14 covers all your profiler requirements, for a highly accurate reading.
- Optimised sensor head for commutators, slip rings and helical grooved slip rings
- Designed for an easy fit into the brush box
- Easy switch from imperial to metric
- Longer sensor than previous version for use in the longer wind power holders

Training and Technical support
The Morgan team are always on hand to support your training requirements offering:-
- Site visits for demonstrations
- Hard copy in-depth manual
- Online step by step guide
- Technical handbooks and technical wall charts sharing brush and holder best practices
- Technical and wall charts explaining common brush and holder issues
- Further training courses on brushes, holders, commutation and slip rings can be booked through our customer service teams

After Sales Support
The MSPro14 is the latest technology for surface profilers and Morgan offer:-
- Calibration Service
- Components available separately
- Software upgrades via online downloads
- Download support- please do not hesitate to contact us
<table>
<thead>
<tr>
<th>Specifications</th>
<th>MSP14™ Surface Profiler</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>± 20 mil (±500 µm)</td>
<td>Imperial/Metric is user-selectable</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.04 mil (1 µm)</td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>±2% ±0.16 mil (4 µm)</td>
<td>At ambient temperature of 73 ±9°F (23 ± 5°C)</td>
</tr>
<tr>
<td>Sampling Interval</td>
<td>Maximum recording speed 4 in/s (100 mm/s)</td>
<td>40 ± 4 mil (1 ± 0.1 mm) Recordings taken in “Shape” mode contain 4 samples per segment</td>
</tr>
<tr>
<td>Memory Data Storage</td>
<td>100+ named Data Sets</td>
<td>Each recording has time/date stamp</td>
</tr>
<tr>
<td>Capacity</td>
<td>100,000+ samples per recording</td>
<td>Total # of samples depends on # of data sets Flash Memory</td>
</tr>
<tr>
<td>Display Type</td>
<td>Colour LCD</td>
<td></td>
</tr>
<tr>
<td>Resolution</td>
<td>640 x 480 pixels</td>
<td></td>
</tr>
<tr>
<td>Viewung Area</td>
<td>6.0”x3.4” (153mm x 86mm)</td>
<td></td>
</tr>
<tr>
<td>Termination Displacement</td>
<td>Custom 8 pin round plug</td>
<td></td>
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</tbody>
</table>

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<tr>
<th>Specifications</th>
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<tbody>
<tr>
<td>Communications</td>
<td>USB 2.0</td>
<td></td>
</tr>
<tr>
<td>Battery Type</td>
<td>Li-Ion</td>
<td></td>
</tr>
<tr>
<td>Voltage</td>
<td>3.7 Volts nominal</td>
<td></td>
</tr>
<tr>
<td>Capacity</td>
<td>7800 mAh nominal</td>
<td></td>
</tr>
<tr>
<td>Operating Time</td>
<td>6 hours (nom.)</td>
<td></td>
</tr>
<tr>
<td>Charger &amp; Conditioner</td>
<td>Charge over USB</td>
<td></td>
</tr>
<tr>
<td>Charge Rate</td>
<td>1.5 A (with included USB charger)</td>
<td>0.5 A (with PC charger port)</td>
</tr>
<tr>
<td>Mechanical Size</td>
<td>9.7”Wx6.1”Lx3.0”H</td>
<td></td>
</tr>
<tr>
<td>Weight – Base Unit</td>
<td>2.2 lb (1 kg)</td>
<td></td>
</tr>
<tr>
<td>Complete Kit</td>
<td>8.8 lb (4 kg)</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td>32°F to 122°F (0°C to 50°C)</td>
<td>80% RH 32°F to 86°F 70% RH 32°F to 122°F 14°F to 140°F (-10°C to 60°C) 95% RH</td>
</tr>
<tr>
<td>Temperature/Humidity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>EN 61000-3-2:2006/A2:2009</td>
<td>Non-condensing</td>
</tr>
<tr>
<td>EMC</td>
<td>EN 61000-6-2:2005</td>
<td>Radiated and conducted emissions RF field, ESD and fast transient immunity</td>
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For all enquiries, please contact our specialist sales and manufacturing sites:

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