Oven Temperature Profiling

**Elcometer 215 Oven Data Logger**

The Elcometer 215 is the easy to use oven temperature profile solution, used to measure and store the temperature profiles of both the sample and the oven during the cure process.

- Memory stores up to 260,000 readings
- Ideal for testing for powder or liquid coatings in batch or conveyor ovens
- Variable measurement interval, date, time, °C / °F
- Print full colour report directly to any HP printer
- Large menu-driven display for easy operation
- Start and stop logging at a pre-set temperature
- Measure up to 6 different temperatures at one time
- High temperature resistant teflon coated probe cables are easy to clean after each run
- Quick display shows maximum temperature, Cure-Index figure and pass/fail for each probe
- Ideal in situations where powder coated thickness is inconsistent
- Print full colour report directly to any HP printer

Ideal for testing for powder or liquid coatings in batch or conveyor ovens.
Oven Data Logger

The logger display shows maximum temperature and Cure-Index figure, percentage and pass/fail sign, as a value or graphic representation for each probe.

Powerful

- Ideal for testing powder or liquid coatings in batch or conveyor ovens
- Stores up to 260,000 readings
- USB data output to ElcoMaster® software, combines with other key inspection measurements
- Variable measurement intervals, date, time, °C/°F

Efficient

- Measure up to 6 different temperatures at one time
- Quick display shows maximum temperature, Cure-Index figure and pass/fail for each probe
- Start and stop logging at a pre-set temperature

Rugged

- Standard thermal barrier kits - ideal for single runs
- High temperature barrier and heat sinks available for longer times at high temperature
- Wide range of K-type temperature probes with strong, highly flexible and easy to clean Teflon® coated cables

USB data output to ElcoMaster® software, combines with other key inspection measurements
Elcometer 215

Oven Data Logger

ElcoMaster® is the easy to use software solution designed specifically for the management and assessment of your temperature profile, allowing you to generate professional inspection reports in seconds. Features include:

Oven Logger Set Up - Create and store unique oven profile setups, name each of the 6 channels, set sampling rates, number of batch runs, start/stop triggers and transfer them to the gauge.

Coating Parameters - Set up a library of individual paint types incorporating min, mid & max cure temperatures as well as the maximum absolute and minimum cross link temperatures.

Coating Datasheets - Save a copy of the coating’s data sheet as a permanent record.

Product Probe Maps - Simply drag and drop up to 6 probe ID markers on to your product photo or drawing to record exact probe placement for each production run.

Customisable Templates - Create your own comprehensive inspection profile - simply choose a relevant gauge setup, paint parameter and product probe map from your library and assign them to your logger data, providing instant, meaningful and professional reports.

Elcometer Cure Value - Using the industry accepted cure value calculation ElcoMaster® provides instant Pass/Fail information by comparing the production run temperature to the coating supplier’s cure requirements.

Graphical Reporting - Standard temperature profile graph, cure process and individual profile/cure graphs combined with the product probe map are available as standard.

Combined Reports - Fully customisable reports can be quickly generated - allowing oven profile reports to be combined with data from coating thickness, gloss & adhesion gauges.
Oven Data Logger

ElcoMaster® Software Oven Profiling Key Features

- Oven Logger set up & programming
- Paint/Powder parameter library
- Product probe maps
- Fully customisable inspection templates
- Selectable probe/channel traces
- Statistical analysis by probe/channel
  - Max, Min, standard deviation, coefficient of variation
- Temperature profile, cure progress, histogram & individual cure value graphs against product
- Time at temperature, time of peak difference
- Time above maximum absolute & minimum cross link temperatures
- Fully customisable inspection reports
- Combined reports - coating thickness, gloss, adhesion, profile, climate, surface cleanliness
- Report generator wizard & PDF generator
- Email or export data
- Import photos, data sheets, critical data, inspection notes, etc & include on inspection reports
- Cloud computing - allows for cross site collaboration, including internal text messaging tool
- Overlay temperature profiles, review and compare multiple oven profiles over time
- Use additional data loggers for multiple channels or run overlays
## Elcometer 215

### Oven Data Logger

<table>
<thead>
<tr>
<th>Technical Specification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part Number</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>G215----2S</td>
<td>Elcometer 215 Oven Data Logger - Standard Thermal Barrier Kit</td>
</tr>
<tr>
<td>G215----2T</td>
<td>Elcometer 215 Oven Data Logger - High Temperature Thermal Barrier Kit*</td>
</tr>
<tr>
<td><strong>Gauge Measurement Range</strong></td>
<td>-200°C to 1300°C (-328°F to 2372°F)</td>
</tr>
<tr>
<td><strong>Gauge Operating Temperature</strong></td>
<td>-30°C to 65°C (-22°F to 149°F) without thermal barriers</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>5°C to 500°C: ±0.5°C (41°F to 932°F: ±1.0°F)</td>
</tr>
<tr>
<td></td>
<td>&gt;500°C: ±1.0°C (&gt; 932°F: ±2.0°F)</td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td>0.1°C (0.2°F)</td>
</tr>
<tr>
<td><strong>Number of Channels</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>Measuring Intervals</strong></td>
<td>Adjustable from 8 per second to 1 per hour</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>260,000 readings or 8 production runs</td>
</tr>
<tr>
<td><strong>Data Output</strong></td>
<td>USB</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>2 x AA batteries</td>
</tr>
<tr>
<td><strong>Gauge Dimensions</strong></td>
<td>153 x 101 x 23mm (6 x 4 x 0.9&quot;)</td>
</tr>
<tr>
<td><strong>Gauge Weight</strong></td>
<td>450g (15.8oz)</td>
</tr>
<tr>
<td><strong>Thermal Characteristics</strong></td>
<td></td>
</tr>
<tr>
<td>Standard Thermal Barrier Kit</td>
<td></td>
</tr>
<tr>
<td>100°C (212°F) for 140 minutes</td>
<td></td>
</tr>
<tr>
<td>150°C (302°F) for 80 minutes</td>
<td></td>
</tr>
<tr>
<td>200°C (392°F) for 60 minutes</td>
<td></td>
</tr>
<tr>
<td>250°C (482°F) for 50 minutes</td>
<td></td>
</tr>
<tr>
<td>High Temperature Thermal Barrier Kit*</td>
<td></td>
</tr>
<tr>
<td>100°C (212°F) for 340 minutes</td>
<td></td>
</tr>
<tr>
<td>150°C (302°F) for 195 minutes</td>
<td></td>
</tr>
<tr>
<td>200°C (392°F) for 130 minutes</td>
<td></td>
</tr>
<tr>
<td>250°C (482°F) for 100 minutes</td>
<td></td>
</tr>
<tr>
<td>300°C (572°F) for 30 minutes</td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions (in thermal barrier)</strong></td>
<td>245 x 245 x 115mm (9.65 x 9.65 x 4.5&quot;)</td>
</tr>
<tr>
<td><strong>Weight (in thermal barrier)</strong></td>
<td>4kg (8.8lb)</td>
</tr>
<tr>
<td></td>
<td>6kg (13.2lb)</td>
</tr>
<tr>
<td><strong>Packing List</strong></td>
<td>Elcometer 215 Oven Data Logger, thermal barrier (Model S), thermal barrier with heat sink block (Model T), ElcoMaster® software, USB cable, carry case, 2 x AA batteries and operating instructions</td>
</tr>
</tbody>
</table>

### Probes & Accessories

<table>
<thead>
<tr>
<th>Probes &amp; Accessories</th>
<th>1.5m (4’9&quot;)</th>
<th>3m (9’8&quot;)</th>
<th>6m (19’7&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamp Air Probe</td>
<td>T21521275</td>
<td>T21521276</td>
<td>T21521277</td>
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<tr>
<td>Magnetic Air Probe</td>
<td>T21521287</td>
<td>T21521288</td>
<td>T21521569</td>
</tr>
<tr>
<td>Clamp Surface Probe</td>
<td>T21521278</td>
<td>T21521279</td>
<td>T21521280</td>
</tr>
<tr>
<td>Magnetic Surface Probe</td>
<td>T99921281</td>
<td>T99921282</td>
<td>T99921283</td>
</tr>
<tr>
<td>Combined Magnetic Clamp Air &amp; Surface Probe</td>
<td>T21521284</td>
<td>T21521285</td>
<td>T21521286</td>
</tr>
<tr>
<td>Probe Identification Tags (Pack of 6)</td>
<td>T21521241</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Thermal Barrier</td>
<td>T21521222</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Temperature Thermal Barrier for Elcometer 215 Model T (Heat Sink Block not included)</td>
<td>T21521217</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat Sink Block for High Temperature Thermal Barrier</td>
<td>T21521219</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Logger to PC USB Cable</td>
<td>T21521220</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Includes Heat Sink

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