

# elcometer® 215 Oven-Logger



The Elcometer 215 is an easy to use oven temperature data recorder which can be used to measure and record the oven temperature profile.

Logging both the product's surface and the air temperature in a cure oven, the Elcometer 215 records the "Temperature Profile" and so provides the User with sufficient information to ensure the consistent quality of your coating process.

Specifically for powder coating cure ovens, wet coating cure ovens, batch ovens and conveyor ovens, the Elcometer 215's measurements, analysis and report options (fully customisable) generate tailor-made information about the curing processes.

The data logger is fitted with a large display for easy menu-driven operation and an immediate display of the measurement results.

- Maximise productivity

- Minimise energy costs
- No more rejects or rework
- Optimise finishing quality
- Document and prove your process is in control according to Qualicoat®, GSB®, ISO 9000, QIB®, etc

### **Data logger features include:**

- Optional add-on to convert the 6 channel data logger into a 12-channel system for more accurate temperature profiling
- Large display for easy menu-driven operation. Simply follow the instructions on the display.
- Menus in five languages: English, French, German, Italian and Spanish.
- Five different data-evaluation methods.
- Displays the results of every stored batch, including Cure-index.
- Standard AA-batteries ensure many hours of continuous operation.
- Extended memory stores 10 batches of 25,000 measurements each.

### **Additional logger features for detailed results:**

- Start and stop logging at a pre-set time and date.
- Start and stop logging at a pre-set temperature.
- Programmable (via PC) for up to 15 paint-types, for accurate calculation of the Cure-index.
- If a paint-type is not available in the library, it can be entered in the logger (1 type per batch).
- Variable measurement interval, date, time, C°/F°

### **Simple 3-step operation for basic features:**

1. Connect the probes to the product and switch the logger "on".
2. Place the logger in the box and send it through the oven.
3. Read the results from the display or send them to a printer or PC

## **Flexible Evaluation Of Data**

### **Quick display**

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

### **Wireless print**

The optional portable infrared printer can print a brief report which includes: Cure-index, maximum temperature and graphs for immediate information review.

**Logger to printer**

A complete, full-colour report can be printed directly to any HP-DeskJet printer using the optional printer-link. No computer required!

**Extensive analysis**

For extensive analysis, comprehensive calculations and fully customisable reports every system is supplied with powerful "Ideal Finish" data analysis software.

**Ideal Finish Software and the Elcometer 215 Oven-Logger**

- The Elcometer 215 Data Logger is supplied with Ideal Finish Software and have been designed specifically for the powder cure and paint cure process. Special options make it possible to evaluate every part of the cure process and quickly judge the oven performance
- Important information such as thermostat settings, track speed, type of paint, client data etc. can be added to print a complete quality report
- The 'SMART-option' in the Ideal Finish software allows the user to insert the individual cure specifications of the powder supplier.
- The Elcometer 215 will inform you immediately after the process if the paint is sufficiently cured or if the cure process has failed.
- Saves on rework costs
- Improves Quality
- Connect to an IR Printer - for immediate results

**A Wide Range of Temperature Probes are Available**

All Elcometer 215 probes have been especially designed to guarantee accurate readings:

- Perfect probe-surface contact
- Low mass and optimised shape to avoid influence on temperature behaviour
- Cable with easy to clean Teflon outer shield, highly flexible due to the twisted cable cores and extremely strong due to the braided metal mesh armour.

**Magnetic surface probe**

This probe is fitted with an ultra strong magnet but still has a very low mass and size. The actual sensor is thermally isolated from the magnet in order not to affect the part's temperature. This sensor is suited for use on round parts, such as tubes.

**Clamp-type surface probe**

Small and elegant surface probe for any type of material. Silver tipped sensor is thermally isolated from the clamp by ceramics.

**Ring-type surface probe**

Universal probe with aluminium ring at the tip for fast response

**Air Temperature probes**

Available with either clamp or magnet.

**Probe-cable**

Most of our standard probes are quipped with our special probe-cable. This cable is easy to clean due to the Teflon outer shield. Each logger comes with a set of metal probe-tags to help the User match each probes with their assigned channels.

## Technical Specifications

|                       |                                      |
|-----------------------|--------------------------------------|
| Accuracy              | ± 1.0°C (0-300°C), ± 3°C (>300°C)    |
| Resolution            | 0.1°C                                |
| Temperature Range     | -50 to 1200°C                        |
| Operating temperature | 0°C to 60°C                          |
| Probe Type            | K Type Thermocouple                  |
| Probe range           | -50 to 300°C                         |
| Indicators            | LCD display 126x64 pixels            |
| Cable                 | 2.5mm stereo jack to sub-D9          |
| Memory:               | 254,000 readings                     |
| Measuring intervals:  | 2 seconds to 1 hour, user selectable |
| Power Supply          | 3x AA batteries                      |
| Dimensions (Logger)   | 105 x 86 x 30mm                      |
| Number of Channels    | 6 (or 12 with expansion unit)        |
| Weight                | 300g                                 |
| Printing Output       | infra red (HPSIR) or direct (PCL3)   |
| Data Output           | RS 232 at 115,200 baud               |

## Part Numbers

| Model              | Description   | Part Number |
|--------------------|---|-------------|
| Elcometer 215      | Elcometer 215 Oven-Logger complete with Total Finish Software | G215----1   |
| <b>Accessories</b> | 1.5m Surface Probe  | T21513852   |
|                    | 1.5m Ring Type Surface Probe - fast response                  | T21518555   |
|                    | 1.5m Air Probe  | T21513853   |
|                    | 1.5 m Magnetic Surface Probe                                  | T21513854   |
|                    | 3m Surface Probe  | T21513855   |
|                    | 3m Ring Type Surface Probe - fast response                    | T21518557   |
|                    | 3m Magnetic Surface Probe                                     | T21513856   |
|                    | Logger to PC Interface Cable                                  | T21518566   |
|                    | PCL3 Printer-Link Converter with Cable                        | T99918561   |
|                    | IR Printer  | X99913877   |
|                    | Steel box, lid and gasket                                     | T21513859   |
|                    | Gasket – Small 255 x 205mm                                    | T21513862   |
|                    | Heat Absorber   | T21513861   |
|                    | Ideal Finish Software   | T21513863   |
|                    | Additional Data Logger  | T21513866   |
|                    | 6 Channel expansion unit                                      | T21518559   |
|                    | 6 Channel expansion unit heat absorber                        | T21518560   |

## Shipping List (Complete Kit):

Elcometer 215 Oven-Logger, Interface Cable, Stainless-Steel Box, Lid & Gasket, Heat Absorber (two Halves), 3 x 1.5m Surface probes, 1 x 1.5m Air Probe, Elcometer Oven-Logger Software (EOLS), Instruction book.