

ERSA Sensor Shuttle PTP® – Professional Temperature Measuring System



Intelligent measuring system to determine important solder parameters of reflow and wave soldering systems

Today's electronic manufacturing is characterized by demands for the highest quality, clearly defined processes and parameters as well as the proof of their reproducibility and reliability.

An ideal and flexible instrument for evaluating and monitoring processes is the ERSA Sensor Shuttle PTP. When it comes to measuring and evaluating temperature, speed and solder wetting profiles, this system can be used in any mass soldering process including reflow, wave and selective soldering.

The system lets the user monitor the processes online and evaluate the reported parameters in real-time.

Wireless data transmission in real-time using Bluetooth technology makes the ERSA Sensor Shuttle PTP especially easy and convenient to use. A cable connection between the Shuttle and the PC is no longer required. The system is equipped with 8 measurement channels that can be connected to commercially-available Ni/CrNi thermocouples.

Depending on the measurement board used, process-relevant measurement data generated by wave and selective soldering systems are also provided. This includes wetting times in the soldering waves, flux wetting, conveyer speeds and, of course, PCB temperatures at important points.

The appropriate measurement boards fulfilling the various requirements are available for all soldering processes. If measurements are performed on actual components in reflow systems, a flexible transport carrier is provided for conveying the Shuttle system. This carrier is easily adapted to the transport width required by the reflow soldering system.

The ERSA Sensor Shuttle Software PTP allows a graphical display to aid you in optimally evaluating,

documenting and archiving the measurement data. PTP runs on Windows 2000/XP thereby providing not only simple menu control and user-friendly handling but also all the advantages of Windows technology and its individual modules.

Easy gradient evaluation is enabled by the following: temperature evaluation at any given moment, maximum temperatures, temperature gradients, differential temperatures, min./max. solder wetting times, conveyer speeds and envelope curves with automatic report generation. An overlay function allows current profiles to be compared with saved reference profiles.

The stylized fading in of the heating and cooling zones on the soldering system temperature profile enables not only the display of the temperature/time but also the temperature/path and therefore the assignment of the respective machine zone to the actual PCB temperatures.

Advantages at a glance:

- Evaluate, test and document process
- Precise and reproducible measurements, even at high temperatures in lead-free processes
- Process optimization with the highest possible component safety using stress-integral calculation for components (in cooperation with the Fraunhofer ISIT in Itzehoe, Germany)
- Easy handling due to wireless Bluetooth technology
- Fast and flexible due to real-time measurement using 8 channels
- In-house calibration saves time and money
- One measurement system for ALL soldering applications: reflow, wave and selective
- Highest quality - Made in Germany with a two-year guarantee

ERSA Product Range

Soldering Tools

Soldering / Desoldering
• i-CON series

BGA/SMT Rework

IR Rework Center
• IR/PL 550 A
• IR/PL 650 A
HR 10 A Hybrid Tool

Inspection Systems

• ERSASCOPE plus
• ImageDoc Software

Soldering Systems

Wave soldering
• ETS series
• EWS series
• N-Wave series
• POWERFLOW series

Reflow soldering
• HOTFLOW 2 series

Selective soldering
• VERSAFLOW series

Process software
• EPOS
• CAD Assistant

Paste Printing

• VERSAPRINT series

Accessories

• Solder bar & wire
• Solder paste
• Flux

Other Services

• Know-How Seminars
• In-house training
• Test soldering
• Installation and maintenance assistance
• Process support

