

EasyReflow

cost-effective profiling for the electronics industry, using the well-proven Datapaq® EasyTrack®2



DATAPAQ

Datapag[®] is the world leader in the manufacture of temperature measurement and analysis systems for all types of industrial heating processes. Founded in 1984 in Cambridge (UK), the company develops and manufactures sophisticated systems for recording and storing temperature profiles in rugged environments. Datapaq solutions are used to control and optimize processes in many different industries, including photovoltaic, automobile, steel, electronics, ceramics, textiles and food. Datapag is ISO 9001 certified and a member of the Fluke Group. Together with our sister companies IRCON and Raytek, Datapaq is a global expert in temperature measurement & profiling.

EasyReflow is the latest Datapaq system and is designed specifically to provide cost-effective profiling capability to users in the electronics assembly industry. The system uses the proven technology of the EasyTrack2 logger and combines it with the new EasyReflow analysis software, enabling users to measure the reflow and wave soldering process quickly and easily.



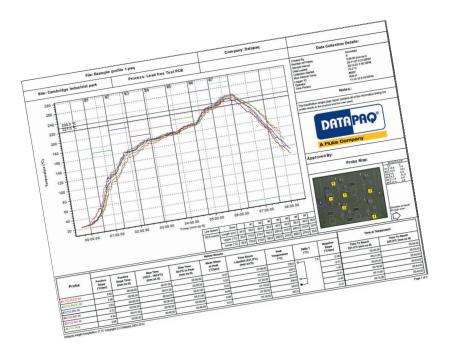
Wave Solder Pallet

Easy, accurate measurement of the wave soldering process without complicated tools.

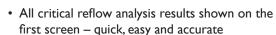
Combine your EasyReflow system with our wave solder pallet to get repeatable wave process information. Now it's easy to monitor the preheat chip and main waves of your machine. Insight software will analyze the parallelism, contact time, contact length and even the conveyor speed automatically. And you can view all these critical parameters in one easy-to-read report.

EasyReflow Insight™ Software – simple and efficient

Designed from the outset with efficiency and ease-of-use in mind, the Datapaq EasyReflow analysis software converts raw data into a full analysis of the soldering process performance quickly and easily. The software has all of the in-depth analysis required to troubleshoot a non-performing process, with user-friendly wizards to guide the user when needed. A single click of the mouse attaches the process file to the raw readings, thus showing the oven details, heater and belt speed settings, as well as an image of the product. All of this information can be reproduced on one clear profile report that will satisfy the requirements of process and quality managers, as well as your customers.



Analysis Tools – transforming raw data into valuable information



- In depth interrogation of all results via analysis tabs – detailed information when you need it
- Single page process file oven zones, settings and product image on one easy-to-read screen
- Fully compatible with both wave* and reflow soldering processes, two processes, one profiler
- Results and graph can be exported via clipboard create custom reports in word-processor or spreadsheet
- Auto results file e-mail results can be shared with a single click



^{*}Optional wave solder process monitoring tool CS3070 can be purchased.



EasyTrack2 Data Logger – accuracy and durability

The EasyTrack2 system has been designed to provide a comprehensive and rugged datalogger at a competitive price. The logger is built to the same high standards as the other loggers in the Datapaq range that are used in thousands of factories worldwide. It features a clear internal status and battery condition display using three LEDs and can be started or stopped via the push buttons. All results are sent back to a PC running the Insight EasyReflow software using a high speed USB interface.

The EasyTrack2 datalogger can measure the product temperature from up to 6 type K thermocouples. The unit is accurate to $\pm 0.5^{\circ}$ C (31°F) and can take readings at up to 10 times per second from each thermocouple. The accuracy of every unit is tested and guaranteed up to a maximum internal temperature of 85°C (165°F).

Intelligent power management, non-volatile memory and automatic power-down after use ensure that you get the most from the user-replaceable battery.



EasyReflow Thermal Barrier ...

The EasyReflow thermal barrier protects the logger through the longest and hottest of soldering processes, maintaining the logger within its operating range for up to 8 minutes at 300°C (570°F.) Using the best quality microporous ceramic insulation available, housed in a thin but rugged stainless steel outer case, this thermal barrier will survive the harsh treatment of the production line. With a width of only 90 mm (3.54 in,) it can be used when processing the narrowest of circuit assemblies. The overall height of 31mm (1.22 in) enables it to pass through the vast majority of reflow soldering ovens.

Thermocouples

PA0210 FAST RESPONSE EXPOSED JUNCTION

This is the standard thermocouple used throughout the reflow industry and is constructed from type K thermocouple wire. Each conductor is PTFE insulated and then twisted together to prevent tangling in use. The wire diameter is 0.2 mm (.007 in), providing a good compromise between size and strength. The thermocouple tip is pre-tinned to ease soldering to the PCB. We recommend the use of an activated flux and high temperature solder to attach this thermocouple to the PCB assembly.



PA0215 FIBER INSULATED PROBE

Exposed junction type K thermocouple constructed from 0.2mm (.007in) wire with glass fiber insulation. This probe is designed for continuous use up to 500°C (930°F) and is, therefore ideally suited to high temperature soldering applications. For best results, we recommend that the probe is attached using an activated flux and high temperature solder.





Technical Specifications

| Data Logger | ER6061 |
|--|--|
| Number of Channels | 6 |
| Thermocouple Type | K |
| Sample Interval | 0.1 seconds to 10 minutes |
| Accuracy | ±0.5°C (±0.9°F) |
| Accuracy Protection | Cold junction compensation – accuracy guaranteed up to 85°C (185°F) logger temperature. |
| Resolution | 0.1°C (0.2°F) |
| Maximum Internal Operating Temperature | 85°C (185°F) |
| Safety Features | User programmable internal status monitoring prevents use of logger if too hot. Auto shutdown when temperatures reach 85°C (185°F). |
| Measurement Range | -150 to 500°C (-238 to 932°F) |
| Memory | Non-volatile with hot data protection |
| Memory (readings per channel) | 6000 |
| Data Collection Start | Start button/temperature trigger |
| Battery | Good quality 9V PP3 Alkaline (replaceable) |
| Battery Life | At 5 second intervals – 120 hours continuous measurement At 1.0 second intervals – 74 hours continuous measurement At 0.5 second intervals – 43 hours continuous measurement |
| Hardwired Telemetry Capability | Yes |
| LED Indicators | Always informed of status |
| Battery Compartment | Magnetic catch – access without the need for tools |



Each Datapaq system is supported with a full one year warranty. Complementing the warranty, we offer a yearly check and re-calibration service at our service centers worldwide.





MINIMUM COMPUTER SPECIFICATIONS

- Microsoft Windows® 2000 or above recommended
- 500 MHz processor
- 128 MB RAM
- Monitor resolution 1024 x 768, 256 colors
- 50 MB free hard disk space
- USB communication
- CD-ROM drive

The Worldwide Leader in Temperature Profiling



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