

# DATAPAQ<sup>®</sup> SelectivePaq

Measure the Selective Soldering Process Easily and Repeatably

The DATAPAQ SelectivePaq is designed specifically for use in the confined space of the miniature wave selective soldering process. Combining the new four channel DATAPAQ Q18 micro data logger with a thermal enclosure and the optional sensor array PA1650, it is a complete solution for monitoring the stability of the selective soldering process.



Selective soldering is replacing hand or wave soldering, as it allows greater flexibility in component layouts and produces more consistent joint quality. To monitor this process has been a challenge on machines where the space is limited and the profiler must transit through the process measuring temperatures from the product.

The new DATAPAQ SelectivePaq addresses this size challenge while retaining the full functionality and flexibility of a reflow profiler. The optional selective soldering sensor PA1650 can be used to measure process repeatability using both dip solder and preheat sensors.

DATAPAQ SelectivePaq system

### SYSTEM FEATURES

The smallest volume electronics industry profiler on the market can ride through the process with the product to obtain real product temperatures during the selective soldering process.

When used in combination with the selective soldering sensor PA1650, the DATAPAQ SelectivePaq measures both the preheat temperature and dip soldering stability.

The system is supplied with the full DATAPAQ Reflow Insight<sup>™</sup> software and data analysis and includes:

- Maximum slopes
- Maximum temperatures
- Wave contact times

# **TECHNICAL SPECIFICATIONS**



Thermal barrier TB2088



Data logger DQ1804



Thermocouple PA1610



Selective soldering sensor PA1650

## **THERMAL BARRIER TB2088**

The TB2088 is designed to protect the data logger from the process heaters and ensures maximum stability for the measuring circuits. At only 20 mm (0.79 in) high and 40 mm (1.57 in) wide it is the smallest system on the market.

**Dimensions (h×w×l)** 20×40×180 mm (0.79×1.57×7.09 in) Weight 0.3 kg (0.66 lbs)

# **DATA LOGGER DQ1804**

The micro data logger DQ1804 is housed in an aluminum case machined from a solid block providing a rugged, but lightweight enclosure. It can measure temperature at up to 20 times per second from four type K thermocouple inputs. The logger makes use of the latest micro-miniature connectors to save space and weight while maintaining ruggedness.

Number of channels 4 Sample interval 0.05 to 10 min Measurement range -200 to 1370 °C (-328 to 2498 °F) Resolution 0.1 °C (0.2 °F) ±0.5 °C (±0.9 °F) Accuracy **Dimensions (h×w×l)** 17×35×149 mm (0.67×1.38×5.87 in) Weight 155g (0.34lbs)

#### THERMOCOUPLES

Fast response thermocouple PA1610 fitted with micro miniature plug		
Length	0.5 m (20 in)	
Wire diameter	0.2 mm (32 AWG)	
Temperature range	0–265 °C (32–509 °F)	
Accuracy	±0.4% or +1.1°C (2.0°F) ANSI MC96.1 special limits of error.	

#### Selective solder process sensor PA1650 with micro miniature plugs

Process sensor carrier plate machined from aluminum and supplied with one preheat sensor PA1651 and two dip solder sensors PA1630. Provides repeatable measurements of the selective soldering machine's performance. Supplied complete with depth setting gauge and hex key.

Width	65 mm (2.56 in)
Length	120 mm (4.72 in)
Thickness	4 mm (0.16 in)
Total height	50 mm (2 in) with cables

#### **INSIGHT REFLOW SOFTWARE**

The DATAPAQ SelectivePaq is used in conjunction with DATAPAQ Insight reflow software that combines ease of use with ability to conduct full data analysis when needed. Insight software can be used to monitor reflow, wave, vapor and selective soldering. All are supported by wizards to guide users step-by-step through the process, ensuring accurate consistent analysis.

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#### Worldwide Service

Fluke Process Instruments offers services, including repair and calibration. For more information, contact your local office.

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