SPS Smart Manual Profiler

The smart profiler for reduced cost, improved quality and convenient data sharing

Smart Capabilities

- Connectivity to factory level communication and analytics
- Integrated Navigator Power oven setup software. The standard Navigator software does an exhaustive search on all available oven setup combinations and selects the most optimum based on the user’s criteria
  - Center of process window
  - Max conveyor speed
  - Lowest electricity use
- PWI - Instant process analysis with a single number
- Unique process specifications for each thermocouple
- Mobile device accessibility
- Real-time profiling
  - (Except the SPS 7 TC model which is also available in datalogging only)
- Intelligent software that condenses large data volumes into simple actionable information and insight

Optional Smart Capabilities

- Auto-Focus Power software with intelligent database to enable oven setup recommendations prior to running a profile
- Expandable to the KIC smart factory ecosystem
  - SPS acts as the programming tool to KIC’s real-time and automatic process transparency & traceability systems
  - SPS can connect to KIC’s factory level database model
    - Analytics
    - Data sharing
    - MES connectivity and more

- Sweet spot optimization. The most common optimization is to seek the mid point between the process window’s high and low limits
  - The sweet spot optimization enables the user to select a target point within the process window limits

Basic Features

- Fast and accurate manual profiling
- Single screen overview
  - Profile graph
  - Key profile data such as peak temperature
  - Oven settings
  - Suggested improved oven settings
- Intuitive user interface
- Solder paste specification library
- SPC and Cpk charting
- Profile stacking capabilities for multiple profile runs between data sharing. 30 profile capability.
- Available in 7, 9 and 12 TC versions

Hardware

- LCP (Liquid Crystal Polymer) enclosure for better heat protection and faster cool-down between profiles
- Robust and durable enclosure and shields tested to 5 foot drops onto cement floor
- Long lasting NiMH rechargeable batteries for a reliable and safe power source. Enables wall socket charging and USB charging direct from computer

Built-In Convenience

- Real-time profiling enabled via Smart Dock pairing (included with the real-time units) using ANT technology
- Record fast cooling to minimize wait between profile runs
- Secure and easy thermal shield opening and closing
- Instant profile analysis
  - How well the profile accommodates the process window

SPS Advantages

- Advanced Materials and Design
- Smart Oven Setup Software
- Compatible with KIC ecosystem
- 2 Year Warranty
- 24 Hour World Class Customer Support
SPS Smart Profiler Kit Contents

<table>
<thead>
<tr>
<th>Smart Profiler</th>
<th>Software CD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Dock (Wi-Fi - ANT)*</td>
<td>USB Software Protection Dongle</td>
</tr>
<tr>
<td>USB Cable (A-Male/Micro-B)</td>
<td>Electronic User Manual</td>
</tr>
<tr>
<td>Thermal Shield*</td>
<td>Electronic Hardware Guide</td>
</tr>
<tr>
<td>Gloves</td>
<td>Getting Started Guide</td>
</tr>
<tr>
<td>Thermocouples*</td>
<td>Calibration Certificate</td>
</tr>
<tr>
<td>Scissors</td>
<td>Carrying Case</td>
</tr>
<tr>
<td>Power Supply</td>
<td></td>
</tr>
</tbody>
</table>

* These items may vary according to specific models ordered.

Datatalogger Model: data are downloaded to the computer through a USB cable after the run.

Wi-Fi Model: data are sent via Wi-Fi to the computer in real-time during the run. Data are also stored internally for USB download after the run.

**Specifications subject to change without notice.**

**Temperature Tolerance Table**

<table>
<thead>
<tr>
<th>CONFIGURATION</th>
<th>DIMENSIONS (mm)</th>
<th>150°C</th>
<th>200°C</th>
<th>250°C</th>
<th>300°C</th>
<th>350°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Length x Width x Height)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless Steel Shield, 7 CH</td>
<td>371.0 x 75.0 x 23.0</td>
<td>19.5</td>
<td>14.3</td>
<td>12.7</td>
<td>11.0</td>
<td>9.6</td>
</tr>
<tr>
<td>CoolTouch Stainless Steel Shield, 7 CH</td>
<td>371.0 x 77.0 x 25.0</td>
<td>23.5</td>
<td>16.8</td>
<td>13.7</td>
<td>11.6</td>
<td>10.6</td>
</tr>
<tr>
<td>Stainless Steel Shield, 9 CH</td>
<td>371.0 x 100.0 x 23.0</td>
<td>23.5</td>
<td>17.5</td>
<td>14.5</td>
<td>12.5</td>
<td>11.5</td>
</tr>
<tr>
<td>CoolTouch Stainless Steel Shield, 9 CH</td>
<td>371.0 x 102.0 x 25.0</td>
<td>25.8</td>
<td>18.2</td>
<td>15.4</td>
<td>13.6</td>
<td>11.9</td>
</tr>
<tr>
<td>Stainless Steel Shield, 12 CH</td>
<td>371.0 x 114.0 x 23.0</td>
<td>22.5</td>
<td>17.6</td>
<td>15.1</td>
<td>13.7</td>
<td>11.3</td>
</tr>
<tr>
<td>CoolTouch Stainless Steel Shield, 12 CH</td>
<td>371.0 x 116.0 x 25.0</td>
<td>24.2</td>
<td>19.1</td>
<td>16.1</td>
<td>14.6</td>
<td>12.0</td>
</tr>
</tbody>
</table>

Profiling Reduced to a Single Number

The PWI measures the profile’s fit to the process window in a mathematical and objective manner by using a single number. This aids in optimizing the process by comparing and ranking alternative profiles in terms of their fit to the available process window. The lower the PWI, the more efficient and stable the process! *(See the PWI data sheet for a detailed explanation)*

The Process Window Index™

**Minimum System Requirements**

- Dual Core / 1 GHz Processor PC with 2 GB RAM
- 2 GB available storage
- Video 1024 x 768 resolution / 16-bit
- 1 available USB port (for data download or Smart Dock)
- 1 available USB port (for software protection dongle)

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**All KIC products are designed to give maximum value and fast payback by streamlining your thermal process. Investment in a KIC product is a step toward total process control and quality management. All KIC products come with a no questions asked, 30-day money back guarantee.**

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**Note:** The SPS Smart Profiler software, Profiling Software 2G, may interface directly with some oven controllers, eliminating the need for manual setpoint data entry. Please consult your oven supplier for availability.

Accuracy based on factory calibration.