



SPS Pro

The smart profiler package that maximizes investment with smart optimization and proactive oven health monitoring capability



SPS Pro™ Advantages

- Advanced Materials and Design
- Smart Oven Setup Software
- Includes KIC HeatMap™ Option
- Compatible with KIC Ecosystem
- 2 Year Warranty
- 24 Hour World Class Customer Support



SPS Pro

SPS Smart Profiler with HeatMap™

Pro Capabilities

- Transforms underused profilers into highly productive monitoring tools
- Real-time visualization of each zone's performance vs a reference condition
- Identifies intermittent thermal drifts that may not be visible during isolated profile checks
- Integrated Navigator Power™ optimization. Powerful search engine identifies optimum recipe setup
- PWI – Instant process analysis with a single number
- Unique process specifications for each thermocouple

Additional Standard Features

- Intuitive TAS (Thermal Analysis System) software
- Fast and accurate manual profiling
- Single screen overview
 - Profile graph
 - Metrics (slopes, reflow time, peak)
 - Oven settings
 - Suggested optimal settings
- Solder paste specification library
- SPC charting - Automatic Cpk calculations
- Profile Stacking – multiple runs before download

Optional Smart Features – AI, Data Analytics, Automated Outputs

- ***NEW* Common Recipe Finder™** for efficient production changeover and improved Overall Equipment Effectiveness
- Auto-Focus Power™ - automated NPI oven recipe creation
- Sweet Spot Process Development™ for better process results
- TC mapping for report/audit documentation
- External data outputs
- Audible light tower for out of spec conditions

Hardware and Built-In Conveniences

- LCP (Liquid Crystal Polymer) enclosure for fast cool-down between profiles
- 7, 9, 12, and 24* channel configurations
- NiMH rechargeable batteries. Wall socket or PC USB port charging capable
- Real-time profiling enabled via Smart Dock pairing using ANT technology
- Variety of available robust and durable thermal shields

** Requires additional hardware/software
Contact KIC for information*

SPS Pro

SPS Smart Profiler Specifications

Accuracy:±1.1°C
 Resolution:0.1°C
 Internal Operating Temp: ..0°C to 85°C
 Sample Rate:0.002 to 50 readings/second
 Data Points:72K per channel
 Temperature Range:-150°C to 1050°C
 PC Connection:USB 2.0 (Std-A/Micro-B)
 Power:Internal rechargeable NiMH battery pack
 USB cable connected to PC or included power supply
 10 minute recharge for single profile
 Wi-Fi:Dedicated 2.4 GHz network
 ANT:2.4 GHz - for Pairing with Smart Dock
 Thermocouple Compatibility: Type K, Standard
 Vacuum compatibility:1.12kPa (8.40 torr) up to 45 minutes
 Dimensions (L x W x H mm):
 7-Channel Unit:188.0 x 60.0 x 17.0
 9-Channel Unit:188.0 x 75.0 x 17.0
 12-Channel Unit:188.0 x 98.0 x 17.0

SPS Pro Kit Contents

SPS Smart Profiler	Scissors
Smart Dock (Wi-Fi - ANT)*	Power Supply
HeatMap Probe - 1 TC per Zone* (15 TC Maximum)	Software/Manuals/Hardware Guides on USB Thumb Drive
HeatMap Mounting Hardware	USB Software Protection Dongle
HeatMap Self-Installation** Guide	Getting Started Guide for Profiler and HeatMap
2 USB Cables (A-Male/Micro-B)	Calibration Certificate
Thermal Shield*	Carrying Case
Thermocouples**	
Gloves	

* These items may vary according to specific models/configuration ordered.
 ** KIC Installation and Training available for HeatMap. Contact KIC for details.

HeatMap Probe Specifications

Accuracy:±1.1°C
 Thermocouples:Type K
 Maximum Temperature: ...450°C

SPS WITH THERMAL SHIELD DIMENSIONS TEMPERATURE DURATION (MINUTES)

Model	Length x Width x Height	150°C	200°C	250°C	300°C	350°C	400°C
7 CH Stainless Steel	318 x 78 x 24	19.5	14.3	12.7	11.0	9.6	
7 CH Single Layer Cool Touch	318 x 80 x 26	23.5	16.8	13.7	11.6	10.6	
7 CH Double Layer Cool Touch	318 x 83 x 30	25.5	20.4	16.6	14.4	12.6	
7 CH HT-400 Stainless Steel *	304 x 78 x 29	25.8	17.5	14	12	10.5	9.3
9 CH Stainless Steel	318 x 103 x 24	23.5	17.5	14.5	12.5	11.5	
9 CH Single Layer Cool Touch	318 x 105 x 26	25.8	18.2	15.4	13.6	11.9	
9 CH Double Layer Cool Touch	318 x 109 x 30	34	24.6	19.4	17	14	
12 CH Stainless Steel	318 x 116 x 24	22.5	17.6	15.1	13.7	11.3	
12 CH Single Layer Cool Touch	318 x 116 x 26	24.2	19.1	16.1	14.6	12	
12 CH Double Layer Cool Touch	318.5 x 121 x 30	34.1	25.3	21.4	16.9	15.3	
24 CH Stainless Steel	305 x 216 x 23	25.5	20	16.7	14	12.5	

*Compatible with Datalogger mode only



Corporate Headquarters

16120 West Bernardo Drive • San Diego, CA 92127 USA
 +1(858)673-6050 Phone • +1(858)673-0085 FAX
 sales@kicmail.com • tech@kicmail.com

European Regional Office

europe.sales@kicmail.com • europe.tech@kicmail.com

Asian Regional Office

asia.sales@kicmail.com • asia.tech@kicmail.com
 kicthermal.com kic.cn

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)
 Visit our website at <https://kicthermal.com/support/os-compatibility-chart/> for product compatibility with Windows operating systems.



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.

Copyright © KIC. All rights reserved. Patents pending. Specifications subject to change without notice. KIC and KIC Thermal Profiling are divisions of and registered trademarks and tradenames of Embedded Designs Inc. RPI i4.0, SPS, SRA, SmartDock, X5, KIC Start2, K2, Vision2, Navigator Power, Auto-Focus Power, KIC RPM, KIC Carrier, Wave Surfer, RPI, Process Window Index, PWI, HeatMap and the KIC logo are trademarks or registered trademarks of KIC. All other trademarks and tradenames are the property of their respective holders.