The X⁵ is available in select markets

X⁵ Advantages

- Affordable

- Quick, Convenient, Accurate Profiling

- Easy to Use Software

- Reliable, Robust Hardware

- 24 Hour Customer Support

- KIC Profiler X⁵ datasheet

- KIC Profiler X⁵ A4 size datasheet

Technical Support 24 Hours Every Day Everywhere, Risk Free Guarantee

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.

For more information on any of our products or service please visit us on the Web at: www.kicthermal.com or www.KIC.cn

Service Available

- Technical Support
- Installation and Setup
- Application Support
- Hardware Support
- Guaranteed Warranty

Intelligent Thermal Profiler

Robust and Compact Hardware with 2 Year Warranty

This new and improved thermal profiler hardware is designed to withstand the roughest and toughest daily handling. In addition, the electronic circuitry has been changed to tolerate a higher level of voltage spikes that occur occasionally in some ovens and wave solder machines. KIC is putting its money where its mouth is by offering a standard two year warranty on this durable profiler.

The X⁵™ thermal profiler is available in 7, 9, and 12 channel versions using standard type K thermocouple connectors. Acquiring more data in a small unit is only the beginning. The X⁵'s industry leading performance provides better data acquisition to precisely identify what is going on with each thermal profile and process in the factory. Thermal profile data are conveniently transferred to your computer via a USB connection. The X⁵'s RF version transfers the profile data

in real time to the PC via wireless radio frequency transmitters. Standard AAA batteries power the X⁵ and you have the option of using rechargeable batteries if you prefer. The X⁵ is also powered via the USB cable when connected to a computer, bypassing the batteries, thus extending the duration of their use.

Data Intelligence Software

The X⁵'s thermal profiling software uses a modern, graphical interface that quickly and intuitively guides you through the task of profiling. All your critical profile and process data are measured including slope, peak temperature, time above liquidous, etc. In addition, the software measures the Process Window Index™ (PWI) statistic. The PWI mathematically and objectively identifies your profile's 'fit' to the established process window. A PWI less than 100 indicates an in-spec profile. The PWI is lower as your process is centered within the process window. Therefore, the lower your PWI, the deeper in the sweet spot of the process window. The PWI also instantly reveals where your process or the oven needs to be adjusted. Manual prediction capability comes standard with the X⁵ allowing you to instantly view the expected change in the profile to changes in the oven setpoints. The X⁵ dual mode includes the passive profiling recording functionality and the active oven setup and process optimization capability. The Navigator Power™ software feature automates process improvement and equipment/machine optimization for you and ships standard with the X⁵. Within seconds, the Navigator Power will identify the single best oven setup based on your choice of 3 optimization criteria:

- Center of the process window
- Maximum conveyor speed
- Minimum electricity use

The X⁵ thermal profiler also comes standard with SPC charting software that helps reveal changes in the profile over time. The X⁵ hardware and software establish a new generation of profiler to improve your equipment's production quality, productivity, and documentation.

See the video. In spec reflow oven setup with numerous unique component process windows on the same

board.

Accuracy	± 0.5℃
Resolution	0.1℃
Internal Operating Temp:	0℃ to 85℃
Sample Rate:	0.002 to 10 readings/sec
Data Points:	224,640
PC Connection:	USB 2.0 (Std-A/Mini-B)
Power Requirements:	(3) AAA batteries
Thermocouple Compatibility	
7, 9, 12 Channel Unit	Type K, Standard
Temperature Range:	-150℃ to 1050℃
Dimensions (L x W x H mm):	
7 Channel Unit:	202.0 x 60.0 x 17.0
9 Channel Unit:	202.0 x 75.0 x 17.0
12 Channel Unit:	208.0 x 98.0 x 17.0
Thermal Shield:	See Temperature
Tolerance Table below for specifications.	

Datalogger Model: data are downloaded to the computer through a USB cable after the run.
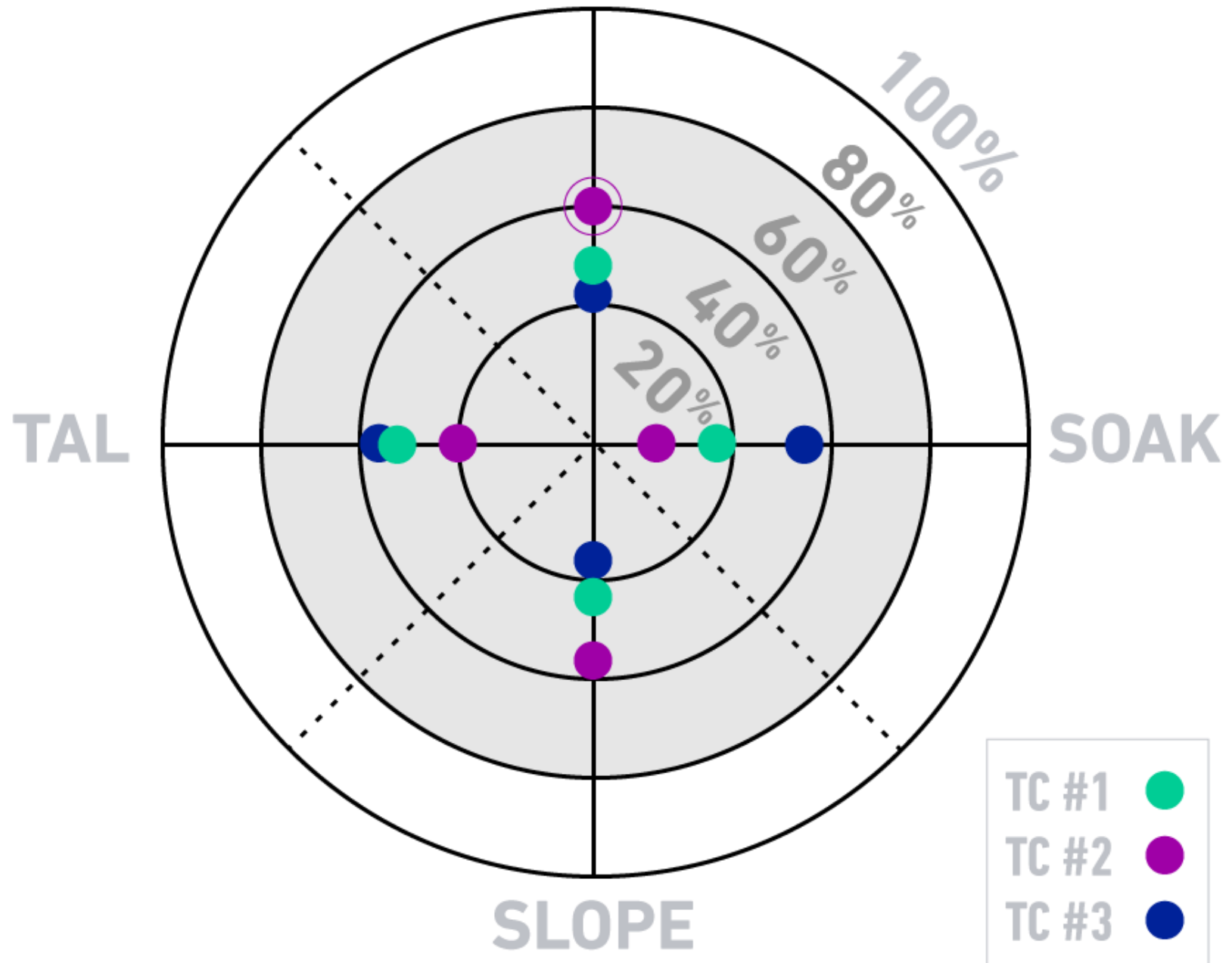
Dual Unit Model: data are sent to the computer in real-time during the run. Data are also stored internally for USB download after the run.

Note: The Profiling Software may interface directly with some oven controllers, eliminating the need for manual setpoint data entry. Please consult your oven supplier for availability. The Profiling Software is dongle protected. Accuracy based on factory calibration.

The Process Window Index

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)

Maximum endurance in minutes at specified temperature

Shield	DIMENSIONS (mm) (Length x Width x Height)	150C	200C	250C	300C	350C	400C
Cool Touch Stainless Steel Shield, 7 CH	302 x 75 x 23	17.5	12.0	9.0	7.7	6.5	
Cool Touch Stainless Steel Shield, 9 CH	312 x 90 x 23	18.1	13.1	10.1	8.4	6.7	
Cool Touch Stainless Steel Shield, 12 CH	323 x 113 x 23	17.7	12.0	8.9	7.4	6.1	
HT Shield 400	298 x 106 x 29	24.9	17.6	14.0	11.5	10.1	9.2

X⁵ Kit Contents

- Profiler
- Thermal Shield
- Software on USB Flash Drive
- Software Protection Dongle
- USB Cable (A Male/Mini-B)
- AAA Batteries (6)
- Scissors
- Base Station (Receiver/Transmitter)*

- Carrying Case
- Thermocouples*
- Electronic User Manual
- Electronic Hardware Guide
- Gloves
- Getting Started Guide
- Calibration Certificate
- Cable USB Gold A Male/ A Female Ext*

Computer Configuration

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)
- 1 available USB port (for software key)

About KIC

KIC is a technology company working to make reflow ovens smarter through thermal profiling, automation and optimization solutions. With offices across the globe, KIC is ready to become your partner in oven based manufacturing.

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Contact KIC

16120 W Bernardo Dr

San Diego, CA 92127 USA

Phone: +1 (858) 673.6050

Fax: +1 (858) 673.0085

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