

# PCT-1000 Programmable Preheater



## More Heat, Lower Temperatures for Faster, Higher Quality Results

The PCT-1000 is a programmable preheater that provides users exceptional ability to increase heat capacity with highly controlled thermal output. The preheater is ideal for aiding high thermal demand applications including lead-free, multi-layer boards and large ground planes. The PCT-1000 can be used in a variety of processes including soldering, desoldering, SMD rework operations and, with its added heat capacity, will provide faster production rates while lowering overall process temperatures.

For more complex applications, the PCT-1000 can be integrated with our programmable hand-held convection tool (HCT-1000) and adjustable tool holder (ATH-1000) as part of the MRS-1000 Modular Rework System.

### Programmable Controls

With four programmable heating zones and one cooling zone, users select time and temperature targets, creating a preheat thermal profile.

Four-zone thermal profiling with independent time and temperature control.



User selects internal or external control.

The PCT-1000 features an advanced heat control function where the temperature is controlled either at the heater output (internal) or at the board (external). The “external” control function uses a thermocouple which can be placed on the board or a component. The external control function enables users to heat with high levels of assurance; preventing such undesirable effects as underside component reflow, thermal shock to sensitive components and damaging peak temperatures.

### The PCT-1000 Powerful Heating Improves Productivity

PCT-1000 is equipped with the highly advanced heater design found on sophisticated OK International rework systems. Its convection heater creates a vortex effect



that efficiently directs and concentrates heat. This, coupled with the precise feedback control and thermal profiling capability, establish the PCT-1000 as a powerful, precise benchtop solution for increasing productivity.

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## Easy Operation and Profile Storage

The PCT-1000 is easy-to-use with clearly marked controls. The front panel features a 20 X 4 LCD display and 3 input buttons. Step by step programming makes profile creation simple and straight forward. The system stores up to 10 thermal profiles plus one default start up profile.

## Unique, Flexible Board Holders

While the PCT-1000 can be used with or without a board holder, users often need a quick and flexible way to position a board over the pre-heater.

The new BH-1000 board holder consists of posts and rails and is a highly flexible system. It has two sets of post-rail assemblies (two posts, one rail per assembly). Two sliding clips are mounted on each rail and require minimal board-edge space to clamp the board. The post-rail assemblies can be located as close as 12 mm (1/2") to virtually any distance apart. Additionally, each post-rail system can be converted to a stand-alone post-pin configuration with removal of the rails and by adding the threaded pins (shown right). These pins can be used for holding board tooling holes or for board support.



2 options: post-rail system (shown above) or post-pin systems (shown below)



PCT-1000 with foot switch



PCT-1000 External Type K thermocouple inputs

## Key Features & Benefits

- Adds heat capacity and enables lower process temperatures
- Increases through-put and reliability of soldering, desoldering and SMD rework processes
- Four-zone programmable settings for time and temperature to create optimum thermal profiles for varying application demands
- Storage for up to fifty users defined profiles for quick, easy set-up
- User selectable control of heating at source (internal) or at target (external)
- Controlled cool-down eliminates thermal shock to PCB and components
- System safety feature automatically shuts off heating when fan is stopped
- High efficiency vortex heater design maximizes ramp to temperature for increased productivity

Part Number	Description
PCT-1000	Programmable Preheater, 350W convection; Type-K T/C kit, foot switch, power cord, User Manual, Advanced User Guide
PCT-FS1	PCT-1000 Foot switch
BH-1000	Post-Rail Board Holder system; four posts, two rails with sliding clips, four support pins, flat-head support (screw)
BH-SP1000	Single Post Board Support; post with height adjustment, four support pins
BH-PK1000	Support Pin Kit; four support pins, flat-head support screw
BH-RK1000	Board Holder Rail Kit; two 300mm rails, four support pins

PCT-1000 Programmable Preheater Specifications	
Rated Power	1200 W
Input	100-240 VAC, 50/60 Hz
Storage Temperature	0° to 50° C (32° to 122° F)
Temperature Range	25° to 350° C (77° to 660° F)
Temperature Control	Type K Thermocouple feedback with users selectable source (internal) or target (external) control External: includes two Type K inputs
Air Flow	Fixed at 19cfm (538 l/minute)
Operational Modes	Setup, Run, Manual, Active Setup
Display	LCD 20 x 4 display segments
Programs	Storage for fifty (50) thermal profiles
Approvals	CE, cTUVus
Maximum time per zone	300 seconds