

SMT & Area Array Rework

PH100



PH100 Low Profile IR Preheater for the Most Thermally Challenging PCBs

Rapid, Safe Soldering on High Mass, Heat-Sinking Assemblies

The PACE **PH100** is a high powered (1600W), non-contact infrared heating system with an ergonomic, low-profile design which permits operators to safely pre-heat PCBs for fast, efficient soldering, rework or repair, even on the highest mass, heat-sinking, lead-free PCBs.



PH 100's sleek, ergonomic low-profile design is perfect for use under a microscope!

Why Use Bottom-Side Preheat? Benefits include:

1. Promotes rapid solder reflow while preventing heat damage and thermal stress or shock
2. Ensures homogenous temperatures across package/PCB
3. Decreases warping & maintains planarity of the rework site
4. Reduces top-side temperature and dwell-time requirements
5. Increases soldering iron tip-life by allowing lower tip temperatures

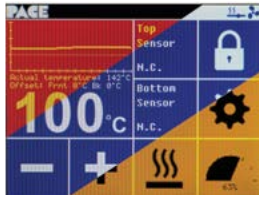
Features:

- o Sleek, incredibly **low working height** improves operator comfort and reduces fatigue, perfect for under microscope
- o Intuitive 3.5" resistive **Touch Screen Display** provides easy adjustment of all operational, temperature and power settings
- o Customize color scheme and button layout at will
- o 4 **Robust IR Heating Elements** provide **1600W of power**
- o Large 300mm x 300mm (11.8" x 11.8") heating area
- o Efficiently transmits heat **without** emitting irritating visible light as other IR systems do
- o Glass-ceramic surface re-emits heat in uniform manner, providing fast and even preheating with minimal shadowing
- o **Closed-Loop Temperature Controlled** by either internal sensor or one of two external thermocouples which can precisely monitor and control temperature on the PCB top or bottom-side
- o **Front and Back Heating Zone** temperatures can be independently controlled, or turned off completely
- o **Magnetic PCB Holder** is easily adjusted to a variety of height/size combinations
- o Handles large assemblies (295mm/11.6" x unlimited) as well as small or irregularly shaped boards
- o Set-temperature range of 20° - 200°C (68° - 392°F)
- o Independent temperature offset adjustment of heating zones +/- 50°C (90°F)





User-Friendly, Ergonomic, Process Controlled, Versatile!



Intuitive, touchscreen-based software allows for easy operation – operator can customize color scheme & button layout at will



Comes standard with an adjustable Magnetic PCB Holder providing a variety of height options



Glass-ceramic surface and high-density emitter array provides uniform heating with no dead spots



External thermocouple control precisely monitors and regulates temperature on the PCB

PH100 Specifications

| Part Numbers | PH 100 8007-0572 (120VAC) | PH 100E 8007-0573 (230VAC) |
|---------------------------------|--|----------------------------|
| Power Requirements | 120 VAC, 50-60Hz | 230 VAC, 50-60Hz |
| Maximum Power Output | 1600 Watts | |
| Weight | 8 kg (17.6 lbs.) | |
| Dimensions | 355mm (14") D x 430mm (17") W x 60mm (2.4") H without Board Holders | |
| Board Size Capacity | Handles large 295mm (11.625") x unlimited PCBs | |
| Working Height | Low profile design with working height of 76mm (3.0") with Board Holders (height above bench, no feet); Lowest Height: about 9mm (.35") above glass-ceramic surface; Medium Height: about 22mm (.87") above glass-ceramic surface; Highest Height: about 37mm (1.46") above glass-ceramic surface | |
| Heating Elements | 4 x 400 Watt, Medium Wave IR Emitters (250mm x 60mm / 9.8" x 2.4" ea.) | |
| Heating Area Dimensions | 300mm (11.81") W x 300mm (11.81") D | |
| Temperature Control Method | Closed loop temperature control by either internal sensor or one of two external thermocouples (one for the PCB top and the other for the PCB bottom) | |
| Closed Loop Temperature Control | Closed loop control at PCB level to control temperature when thermocouple is selected as the control option. | |
| Temperature Control Modes | Three Control Mode Options: Internal Sensor Mode; External Topside PCB Thermocouple Mode; External Bottom-side PCB Thermocouple Mode | |
| Thermocouple Inputs | Two (2) K-Type Thermocouple Inputs: Top-side and Bottom-side PCB Input | |
| Set Temperature Range | 20°C – 200°C (68°F – 392°F) | |
| Touch Screen Display | User friendly 3.5" Resistive Touch Screen | |
| Front and Back Heating Zones | Two (2) separate and switchable heating zones | |
| High Capacity Heating | 1600 Watt or 800 Watt, user selectable | |
| Power Meter | Indicates heater activity (duty cycle) | |
| Performance Response Settings | Normal: Heats up quickly; Fine: Heats up slowly with fine control | |
| Temperature Offsets | User selected temperature offsets for each heating zone | |
| Advanced and User Modes | Advanced Mode: All operational settings available; User Mode: Restricts user access to advanced settings | |
| Programmable Pre-Heating | Select Time-at-Temperature preheat phase with audible alarm | |
| Sound Settings | None: Disables sound; Short: Short beep will sound; Long: Longer beep will sound | |
| Lock Screen/Password | Easy setting of password to prevent unauthorized or inadvertent changes | |
| USB Port | Programming/firmware is upgradeable using USB Flash Drive | |
| Magnetic PCB Holder | Easy to adjust board holder with magnetic feet provides 4 different height options (None, Short Standoffs, Long Standoffs, Angled with Short/Long Standoffs) | |
| Safety Agency Approval | CE compliance/certified by TUV | |

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