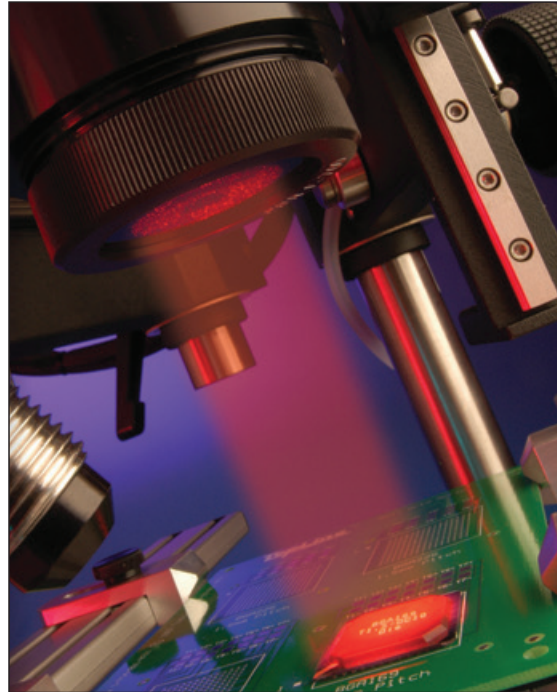




Focused IR SMT/BGA Rework Systems

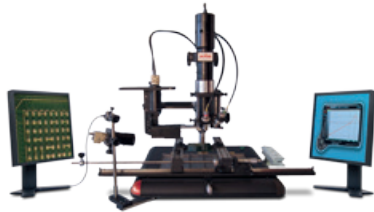


Product Range BGA Rework Stations



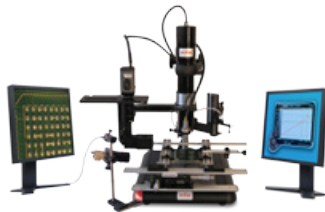
PDR IR-E6 Evolution XL Ultimate Performance, BGA Rework System for Very Large PCBs

- Medium - large sized PCBs - SMDs, BGAs, uBGAs
- Software controlled, Focused IR process
- Highly specified, ultra-accurate system



PDR IR-E3 Evolution Series Ultimate Performance, BGA Rework Station

- Small -medium sized PCBs - SMDs, BGAs, uBGAs
- Software controlled, Focused IR process
- Highly specified, ultra-accurate system



PDR IR-D3 Discovery Lower Cost, BGA Rework Station

- Small - medium sized PCBs - SMDs, BGAs, uBGAs
- Software controlled, Focused IR process
- Lower cost, good mechanics



PDR IR-C3 Chipmate Series Entry-Level SMT/BGA Rework Station

- Mobile phone, PDAs, laptop repair - SMDs, BGAs, CSPs
- Digital controlled, Focused IR process
- Lower cost, simple mechanics

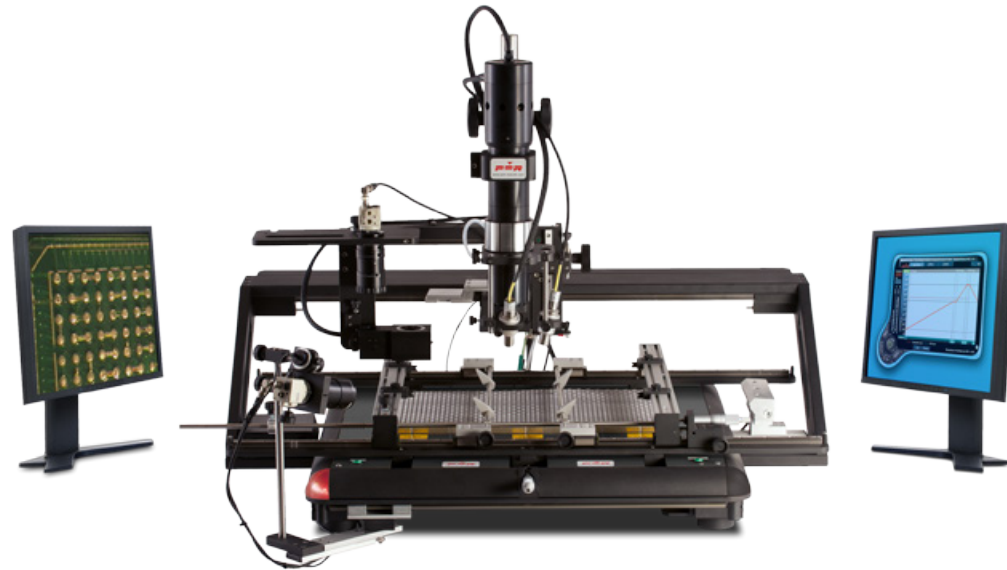
PDR Station	IR-C3	IR-D3	IR-E3	IR-E6
Typical Application	Entry-Level SMT/BGA Rework Station - small/medium PCBs	Professional BGA Rework Station - small/medium PCBs	Ultimate Performance, BGA Rework Station for Small-Medium PCBs	Ultimate Performance, BGA Rework Station for Very Large PCBs
PDR System Features				
Advanced Focused IR Component Heating	IR-C3	IR-D3	IR-E3	IR-E6
Focused IR Lens System	●	●	●	●
F150 - Ø 6-18mm - Lens Attachment	○	○	○	○
F200 - Ø10-28mm - Lens Attachment	○	○	○	○
F400 - Ø12-35mm - Lens Attachment	○	○	○	○
F700 - Ø20-70mm - Lens Attachment	●	●	●	●
Quartz IR PCB Preheating	IR-C3	IR-D3	IR-E3	IR-E6
750W, single zone (120mm x 120mm heating area)	○	○	○	
2000W, single zone (240mm x 240mm heating area)	●			
2000W, two zone (240mm x 240mm heating area)		●		
2250W, two zone (240mm x 240mm heating area)			●	
2800W, three zone (360mm x 240mm heating area)			○	
3050W, three zone (360mm x 240mm heating area)			○	
3200W, two zone (500mm x 270mm heating area)				●
Component Pick and Placement	IR-C3	IR-D3	IR-E3	IR-E6
Handheld vacuum placement system	●			
Standard vacuum placement system (Z-axis and Rotation)	○			
Professional vacuum placement system (Z-axis, Rotation and Soft Landing)		●		
Advanced Professional vacuum placement system (Y/Z-axis, Rotation and Soft Landing)			●	●
Component Nest/Flux Application Facility	IR-C3	IR-D3	IR-E3	IR-E6
Handheld flux dip tray or component print frame	○	●		
Jaw mounted nest with flux dip tray or component print frame		○		
Integrated nest with flux dip tray or component print frame			●	●

PDR Station	IR-C3	IR-D3	IR-E3	IR-E6
Typical Application	Entry-Level SMT/BGA Rework Station - small/medium PCBs	Professional BGA Rework Station - small/medium PCBs	Ultimate Performance, BGA Rework Station for Small-Medium PCBs	Ultimate Performance, BGA Rework Station for Very Large PCBs
PDR System Features				
PCB Handling (PCB Capacity)	IR-C3	IR-D3	IR-E3	IR-E6
Portable Benchtop Mounted PCB Workholder (12" x 10"/300mm x 250mm)	●			
Professional PCB table with micro X/Y (12" x 12"/300mm x 300mm)		●		
Advanced Professional PCB table with macro-micro X/Y (18" x 12"/450mm x 300mm)		○	●	
XL Advanced Professional PCB table with macro-micro X/Y (24" x 18"/620mm x 460mm)				●
Component Temperature Sensing	IR-C3	IR-D3	IR-E3	IR-E6
Standard non-contact IR temperature sensor (Pyrometer) - Ø7mm+ Spot	●	●	●	●
PCB Temperature Sensing	IR-C3	IR-D3	IR-E3	IR-E6
K-type wire thermocouple	●	●	●	●
Standard non-contact IR temperature sensor (Pyrometer) - Ø7mm+ Spot		○	○	●
Advanced Thermal Process Control	IR-C3	IR-D3	IR-E3	IR-E6
Digital controller based thermal control	●	○		
Software based auto profile thermal control	○	●	●	●
Camera Based Vision Systems	IR-C3	IR-D3	IR-E3	IR-E6
Camera/Prism Based BGA/CSP/QFN Alignment System		●	●	●
Auxillary Process Observation Camera		○	○	○
Forced Air PCB Cooling	IR-C3	IR-D3	IR-E3	IR-E6
Simple USB/free standing cooling fan (USA Option)	○	○	○	○
Highly effective, integral PCB cooling with air knife system			○	○

● = Standard Feature ○ = Optional Feature



Focused IR SMT/BGA Rework Systems

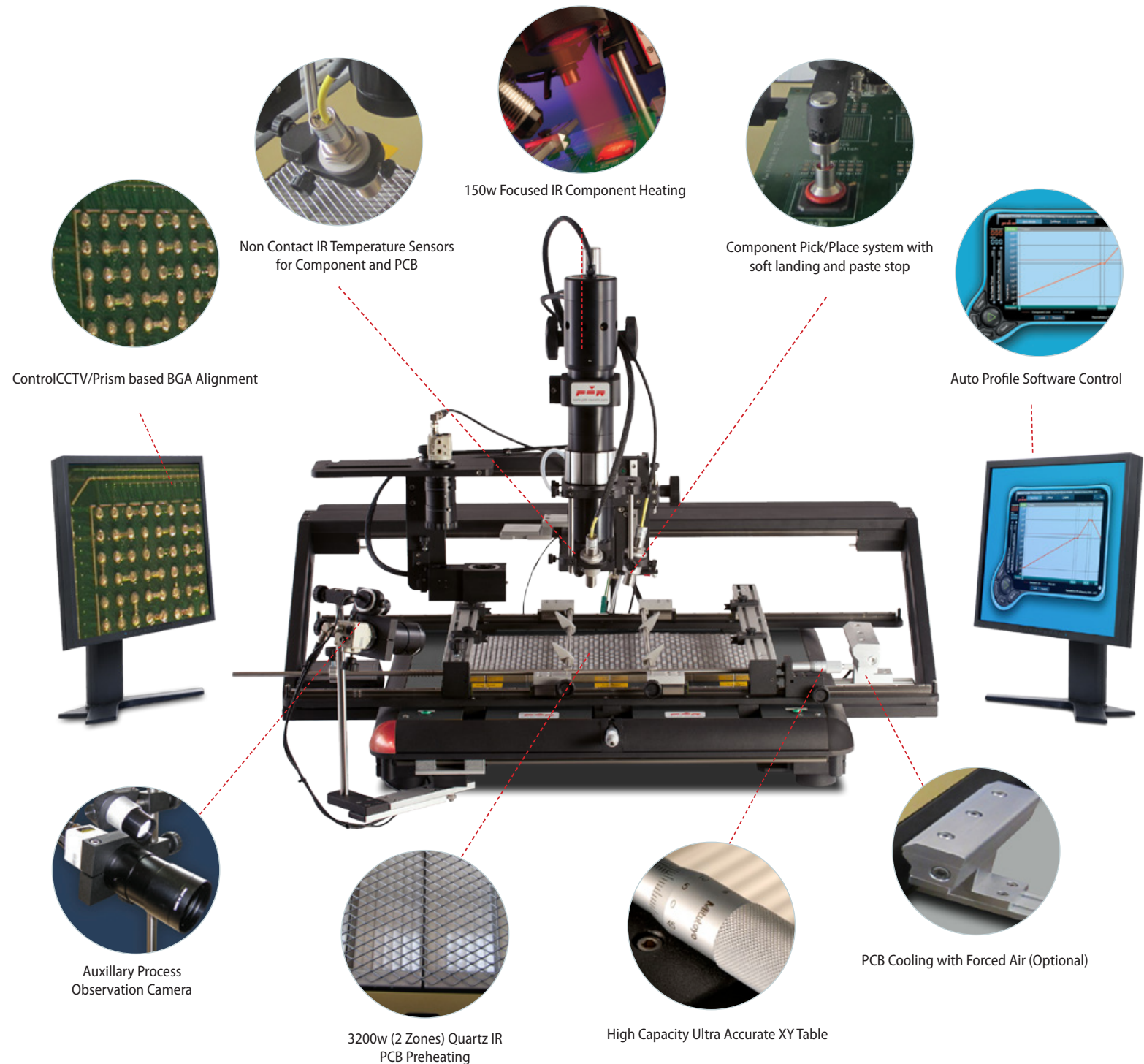


PDR's Focused IR SMT/BGA Rework Station
For Large PCB, BGA Rework

PDR IR-E6 Evolution XL BGA Rework Station

Advanced features:

- **Advanced Focused IR component heating**
150W, lens based Focused IR heating with adjustable image system
- **Quartz IR PCB preheating**
3200W, two zone (500mm x 270mm heating area)
- **Precision Component Pick and Placement**
Advanced Professional vacuum placement system
- **Component Nest/Flux Application Facility**
Integrated nest with flux dip tray or component print frame
- **Precision PCB Handling**
Table de déplacement Macro-Micrométrique X/Y avec doigt support anti-flambage
- **Component Temperature Sensing**
Standard non-contact IR temperature sensor
- **PCB Temperature Sensing**
Standard non-contact IR temperature sensor
- **Advanced Thermal Process Control**
Software based auto profile thermal control
- **Camera/Prism Based BGA/CSP/QFN Alignment System**
Split beam prism system for simultaneous PCB/component viewing
- **Auxiliary Process Camera (Optional)**
Auxiliary process observation camera
- **Forced Air PCB Cooling (Optional)**
Highly effective, integral PCB cooling with air knife system



BGA rework without the complications

The PDR IR-E6 SMT/BGA rework station, using PDR's patented Focused IR technology, has been specifically designed to cope with the challenges of repairing today's Large PCB assemblies.



The station is tool free, gas free, instantly/precisely controllable, clean, modular, upgradeable and produces 100% yield BGA rework without any complications. It provides the extremely high levels of profiling and process control necessary for the effective rework of even the most advanced packages, including SMDs, BGAs, CSPs, QFNs, Flipchips and is ready for 0201 and lead-free applications. The IR-E6 is well specified yet can be easily configured to your exact requirements, with a good range of advanced features to choose from, allowing the operator to quickly and safely rework all types of components without overheating the component, adjacents or the PCB. It uses all the proven attributes of PDR's Focused IR technology, first introduced in 1987 and now used worldwide by over 4000 customers.

Simple BGA rework procedure

BGA rework poses the problem of accessing hidden interconnects in a high density environment. Consequently, it requires a station that is able to access the hidden joints without affecting neighbouring components. A station that is safe, gentle, adaptable and, above all, simple to operate. The IR-E6 is such a station. It is so easy to operate that technicians are able to instantly achieve excellent process control for BGA/SMT rework without the complexities and frustrations normally associated with 'high-end' rework stations.

Paste - Place - Reflow

With the aid of excellent mechanics, optics and control, operators can simply pick up the fluxed BGA from the nest, align it, place it onto the PCB's pads and then reflow with the station's accurate PC based, closedloop component and PCB temperature control.

Details and specifications of advanced features available

- **Advanced Focused IR component heating**
150W, lens based Focused IR heating with adjustable image system
PDR lens attachments with IR image from 4 to 70mm diameter
Reworks all SMDs/ BGAs/QFNs/CSPs including 0201s + lead free applications
- **Quartz IR PCB preheating**
High power, medium wave quartz IR
Large area IR PCB preheater system
3200W, two zone, 2 x 1600W, (500mm x 270mm heating area)
- **PDR lens attachments**
F150 (Ø4 - 18mm spot size) optional
F200 (Ø10 - 28mm spot size) optional
F400 (Ø12 - 35mm spot size) optional
F700 (Ø25 - 70mm spot size) standard
- **Advanced Professional Vacuum Placement System**
With precise 'pick and place' action, Y/Z axis movement and rotation
Soft component landing, Z-axis stop, LED guidance for paste placement
Interchangeable pick-up heads for different applications
- **Component Nest for Precision Pick-up and Flux Application**
With integrated nest with 'component print frame', dip tray or mini stencil
paste-head facility for flux and solder paste application.
- **Advanced Professional Macro-Micro X/Y PCB Table**
Precision micrometer (micro) X/Y and micro rotation control
+/- 10 microns (.0004") movement in X/Y directions
Macro movement in X/Y directions
Up to 18" x 24" (460mm x 620mm) PCB capacity with lockable X/Y axis
X/Y Table has 1" x 1" micro- movement plus macro adjustment
System has a gantry feature. Topside of machine moves in X and Y direction
- **Component Temperature Sensing - Non-contact, IR Sensor**
Manually adjustable, K-type non-contact IR sensor, Ø7-10mm spotsize
Real time monitoring of component temperature throughout process
- **PCB Temperature Sensing - Non-contact, IR Sensor**
Manually adjustable, K-type non-contact IR sensor, Ø7-10mm spotsize
Real time monitoring of component temperature throughout process
- **Auto Profile Process Control Software**
PDR ThermoActive software suite
Digital controller with multi-functional features
Advanced, Windows 7+ ThermoActive software suite
Two channel, real time, closed loop component and PCB temperature control
'Auto-profile' temperature profiling, data logging and reporting
Multi K-type thermocouple (x4) capacity for temp/time testing
- **Camera/Prism Based BGA/CSP/QFN Alignment System**
Split beam prism system for simultaneous PCB/component viewing
Integral LED lighting system with illumination level control
Full colour compact camera and flat screen colour monitor
High quality zoom lens with up to x50 magnification
Precise X/Y axis mounting system
- **Auxiliary Process Camera (Optional)**
Auxiliary process observation camera
Integral LED lighting system with illumination level control
Full colour compact camera with rotation movement
High quality zoom lens with up to x50 magnification
- **Forced Air PCB Cooling (Optional)**
Highly effective, integral PCB cooling with air knife system
Switched compressed air flow, directed under the PCB

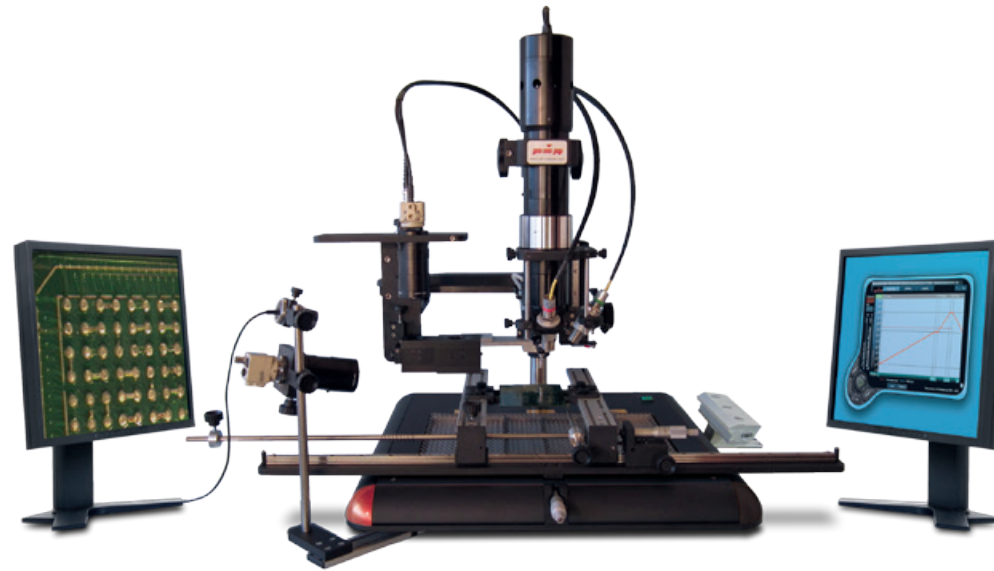
Bench Top Requirements

Top heat power	150W IR
Back heater power	3200W, 2 Zone, 2 x 16700W
Voltage/frequency	208-240 volts 50/60Hz, up to 3KW
Typical components	CSPs, BGAs, uBGAs, QFNs, QFPs, PLCCs, SOICs, small SMDs
Bench area	2000mm (w) x 1000mm (d)
Weight	100 Kg

The above features are mostly optional and also, PDR reserves the right to improve or change specifications without giving notice.



Focused IR SMT/BGA Rework Systems



PDR IR-E3 Evolution Series SMD/BGA Rework Stations

PDR Focused IR Rework Stations for Ultimate Performance
for SMD/BGA/uBGA/QFN/LED Rework

Available in 3 models - E3S (Standard), E3G (Gold) and E3M (Micro)

Multi-purpose flexible rework focused on precision and simplicity

PDR's IR-E3 series of SMD/BGA IR rework systems are engineered to cope with the challenges of repairing today's PCB assemblies. The systems use PDR's patented Focused IR technology, the world's only technology that uses Dual-band Visible IR Heating. **The light that heats.**

The stations are nozzle free, gas free, clean, simple and easy to use. Each model is designed for precise control to produce 100% yield of your SMD/BGA rework without complications. The keys are accurate closed-loop thermal feedback and intuitive easy to use software. The IR-E3 series provides extremely high levels of profiling and process control necessary for the effective rework of the most advanced packages, including SMDs, BGAs, CSPs, QFNs, LEDs, Flip-chips, 0201-01005s and all lead-free applications.

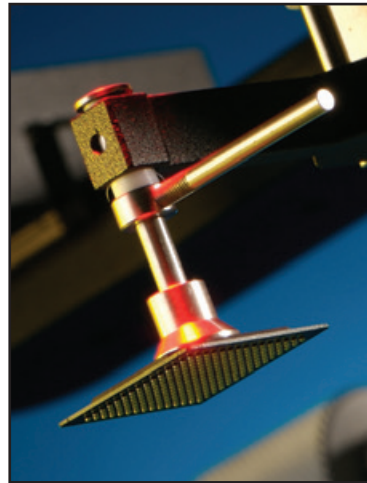
The PDR IR-E3 systems are available in 3 models - **IR-E3S**, **IR-E3G** and **IR-E3M** - each configured perfectly for their respective roles, modular and upgradeable.

PDR IR-E3S

Developed from PDR's pioneering IR rework stations from the 1990-2000s, the IR-E3S, is the standard of the E3 Series. Featuring: Focused IR Component heating, 2250w 2-zone IR PCB preheating, precision mechanics, precision optical alignment and advanced thermal control. The E3S system is flexible, upgradeable and ideal for general purpose SMD/BGA rework on small-medium sized PCBs.

PDR IR-E3G

Enhanced, the IR-E3G **adds superior thermal control and twin cameras for precision alignment and process observation.** Non-contact pyrometers focus on the component and the PCB, for thermal feedback to auto-profiling ThermoActive V7 software. With camera input, the software also permits still and video capture. Mechanical advancements feature precision soft touch component pick up and placement. This system also features large IR 2800W 3-zone IR PCB preheating.



PDR IR-E3G PDR's number one selling system

The **PDR IR-E3G** has been our top selling station for many years, a clear preferred choice of our customers worldwide. A versatile complete system that is ideal for a very wide range of SMD/BGA/uBGA/CSP/LED applications on small-large sized PCBs.

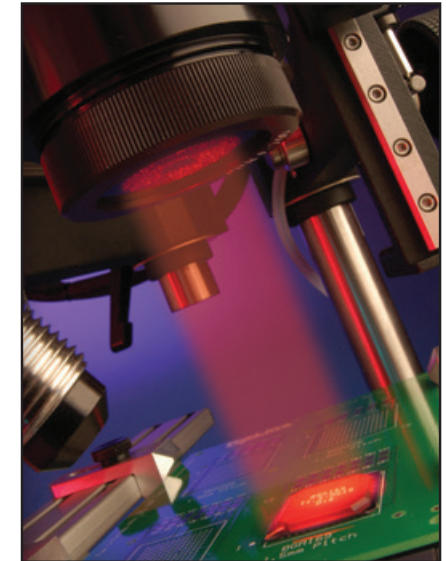
PDR IR-E3M

Introduced in response to our customer demands, we took the E3G and further enhanced it for Micro-rework applications. In addition to general purpose applications, the IR-E3M's thermal, mechanical and optical features are all precisely focused to easily deal with micro components and micro PCBs. In addition to the 3050w micro-PCB preheater, a 750w electronic Thermo Boost is included along with non-contact thermal control. High-magnification vision assisted component alignment, pick-up and ultra-fine placement complete the micro-process handling. This system is absolutely ideal for micro component-PCB rework without complications.

SMD/BGA rework without the complications

Put simply, without any complications, our systems can pick and place micro components or large BGAs and reflow small or large boards with precision and control. The PDR IR process is simple, safe and gentle. Precise control prevents burning or damage to materials. We can visually show the process, record it and repeat it precisely every time. Anyone can learn to use these systems and they are affordable.

Each of the E3 Series rework systems use the same principals of PDR's Focused IR technology, first introduced in 1987. Over 4,500 systems are now in use world-wide. Each PDR customer made a clear well informed decision to buy PDR IR technology. Please contact us to learn why they chose PDR.



Dual-band Visible IR Heating. The light that heats.

Advanced features:

- **Advanced Focused IR component heating**

Dual-band Visible IR Heating system
150W, lens based Focused IR heating with adjustable image system Ø4-70mm

- **Quartz IR PCB preheating**

E3S - 2250W, two zone (240mm x 240mm heating area) with 750W Micro-PCB Thermo Boost
E3G - 2800W, three zone (360mm x 240mm heating area) with 750W Micro-PCB Thermo Boost
E3M - 3050W, three zone (360mm x 240mm heating area) with 750W Micro-PCB Thermo Boost

- **Precision Component Pick and Placement**

Advanced Professional vacuum placement system
Soft-touch component landing

- **Component Nest/Flux Application Facility**

Integrated nest with flux dip tray or component print frame and optional Optical assist

- **Precision PCB Handling**

Advanced Professional PCB table with macro-micro X/Y

- **Component Temperature Sensing**

Standard non-contact IR temperature sensor

- **PCB Temperature Sensing**

K-type wire thermocouple
Optional non-contact IR temperature sensor

- **Advanced Thermal Process Control**

Software based auto profile thermal control

- **Camera/Prism Based BGA/CSP/QFN Alignment System**

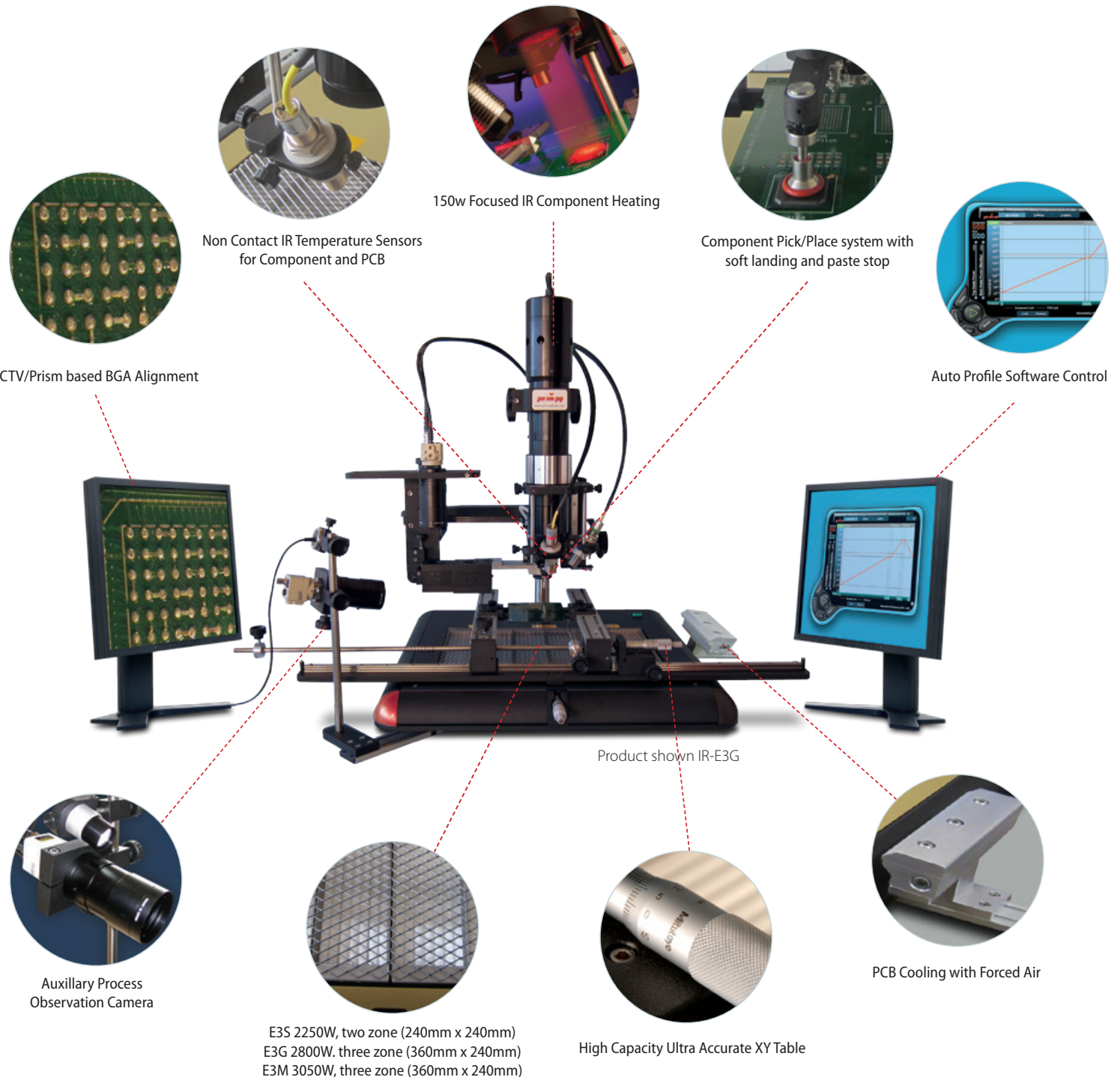
Split beam prism system for simultaneous PCB/component viewing
High mag camera-lens optics

- **Auxiliary Process Camera (Optional)**

Auxiliary process observation camera
Ultra-high mag camera-lens optics

- **Forced Air PCB Cooling (Optional)**

Highly effective, integral PCB cooling with air knife system



CCTV/Prism based BGA Alignment

150w Focused IR Component Heating

Non Contact IR Temperature Sensors for Component and PCB

Component Pick/Place system with soft landing and paste stop

Auto Profile Software Control

Product shown IR-E3G

Auxillary Process Observation Camera

PCB Cooling with Forced Air

E3S 2250W, two zone (240mm x 240mm)
E3G 2800W, three zone (360mm x 240mm)
E3M 3050W, three zone (360mm x 240mm)

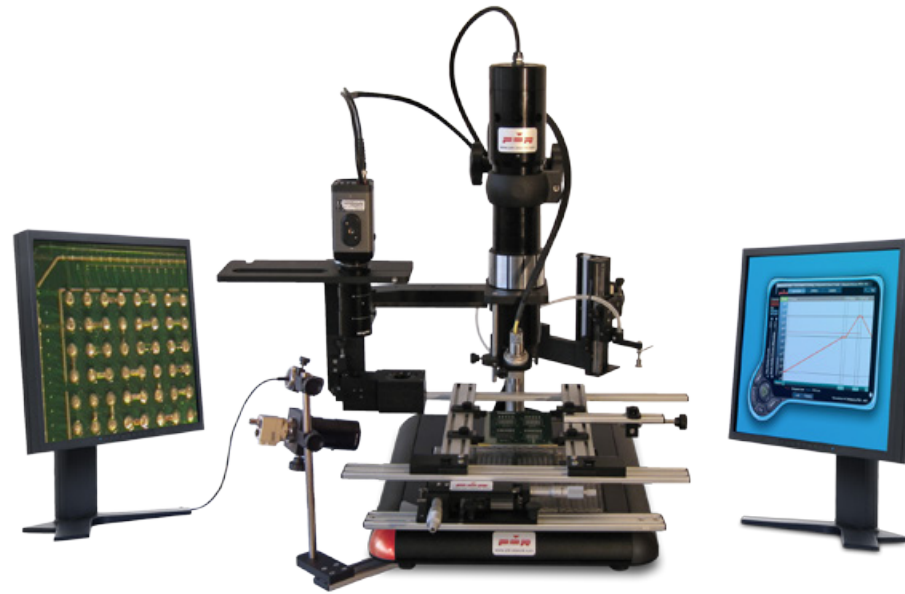
High Capacity Ultra Accurate XY Table



PDR IR-E3 Series
BGA Rework Station



Focused IR SMT/BGA Rework Systems

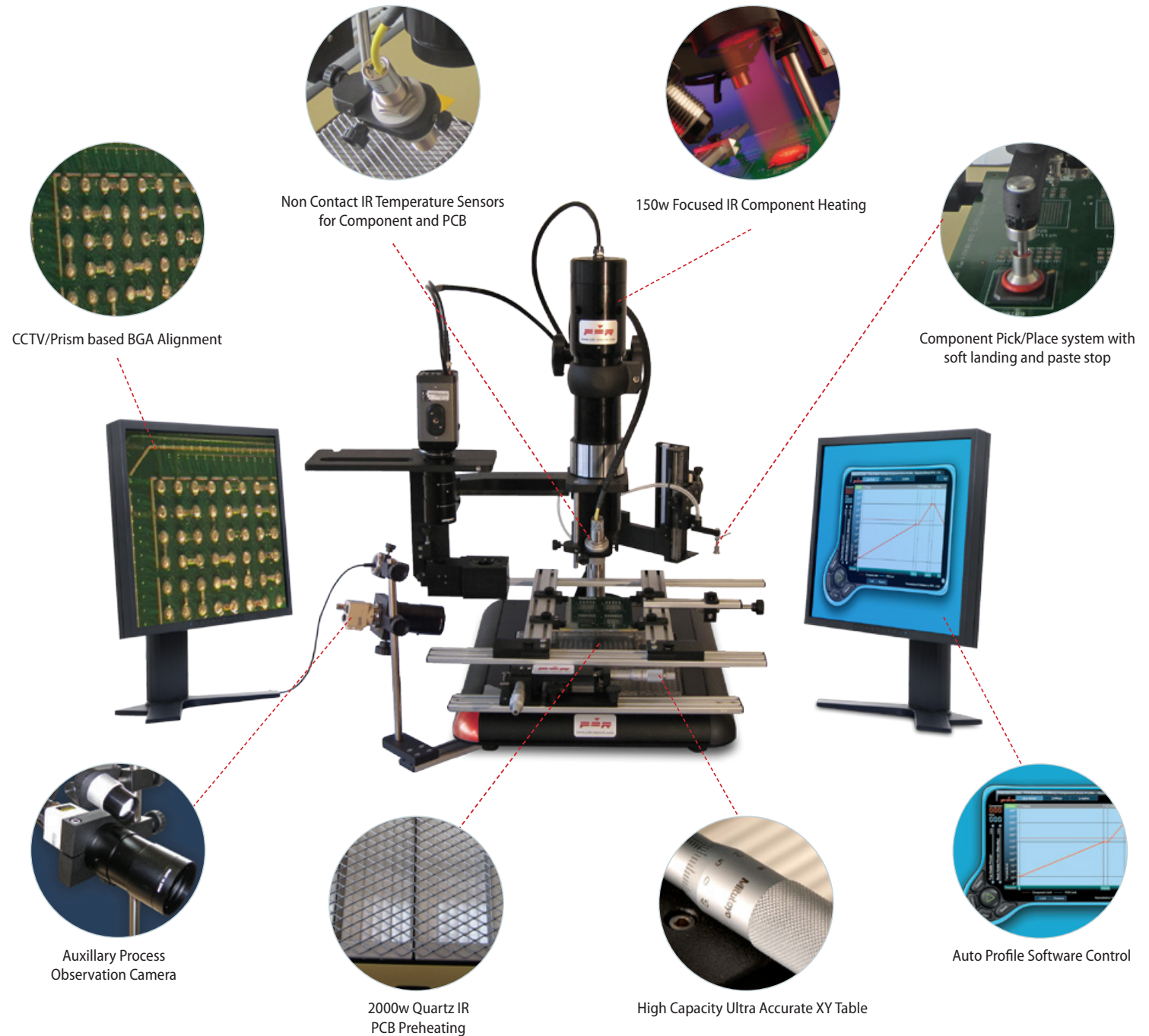


PDR's Focused IR SMT/BGA Rework Station
for Professional Performance in BGA Rework

PDR IR-D3 Discovery BGA Rework Station

Advanced features:

- **Advanced Focused IR component heating**
150W, lens based Focused IR heating with adjustable image system
- **Quartz IR PCB preheating**
2000W, two zone (240mm x 240mm heating area)
- **Precision Component Pick and Placement**
Professional vacuum placement system
- **Component Nest/Flux Application Facility**
Optional Jaw mounted nest with flux dip tray or component print frame
- **Precision PCB Handling**
Professional PCB table with micro X/Y
- **Component Temperature Sensing**
Standard non-contact IR temperature sensor
- **PCB Temperature Sensing**
K-type wire thermocouple
Optional non-contact IR temperature sensor
- **Advanced Thermal Process Control**
Software based auto profile thermal control
- **Camera/Prism Based BGA/CSP/QFN Alignment System (Optional)**
Auxiliary process observation camera
- **Auxiliary Process Camera (Optional)**
Auxiliary process observation camera



BGA rework without the complications

The PDR IR-D3 Discovery rework station, using PDR's patented Focused IR technology, has been specifically designed to cope with the challenges of repairing today's PCB assemblies.

The station is tool free, gas free, instantly/precisely controllable, clean, modular, upgradeable and produces 100% yield BGA rework without any complications. It provides the extremely high levels of profiling and process control necessary for the effective rework of even the most advanced packages, including SMDs, BGAs, CSPs, QFNs, Flipchips and is ready for 0201 and lead-free applications.



The IR-D3 Discovery is keenly priced and can be easily configured to your requirements, with a good range of advanced features to choose from, allowing the operator to quickly and safely rework all types of components without overheating the component, adjacents or the PCB. It uses all the proven attributes of PDR's Focused IR technology, first introduced in 1987 and now used worldwide by over 3500 customers.

Simple BGA rework procedure

BGA rework poses the problem of accessing hidden interconnects in a high density environment. Consequently, it requires a station that is able to access the hidden joints without affecting neighbouring components, a station that is safe, gentle, adaptable and, above all, simple to operate. The IR-D3 Discovery is such a station. It is so easy to operate that technicians are able to instantly achieve excellent process control for BGA/SMT rework without the complexities and frustrations normally associated with 'high-end' rework stations.

Align - Place - Reflow

With the aid of excellent mechanics, optics and control, operators can simply pick up the fluxed BGA from the nest plate, align it, place it onto the PCB's pads and then reflow with the station's accurate PC based, closed loop component and PCB temperature control.

Details and specifications of advanced features available

- Advanced Focused IR component heating**
 150W, lens based Focused IR heating with adjustable image system
 PDR lens attachments with IR image from 4 to 70mm diameter
 Reworks all SMDs/ BGAs/QFNs/CSPs including 0201s + lead free applications
- PDR Lens Attachments**
 F150 (Ø4 - 18mm spot size) optional
 F200 (Ø10 - 28mm spot size) optional
 F400 (Ø12 - 35mm spot size) optional
 F700 (Ø25 - 70mm spot size) standard
- Quartz IR PCB preheating**
 High power, medium wave quartz IR
 Large area IR PCB preheater system
 Standard 2000W, 2 x 1000W zones (240mm x 240mm heating area)
 Optional 750W, single zone (120mm x 120mm heating area)
- Professional Vacuum Placement System**
 With precise placement action, Z axis movement and rotation
 Soft component landing and Z-axis stop for paste placement
 Interchangeable pick-up heads for different application
- Component Nest for Precision Pick-up and Flux Application (Optional)**
 With jaw mounted nest with 'component print frame', dip tray or mini stencil paste-head facility for flux and solder paste application
- Handheld Component Nest and Flux Application Tool (Optional)**
 Handheld nest plate with 'component print frame' or dip tray for flux and solder paste application
- Professional Micro X/Y PCB Table**
 Precision micrometer (micro) X/Y control
 +/- 20 microns (.0008") movement in X/Y directions
 Macro movement in X direction
 Up to 12" x 12" (300mm x 300mm) PCB capacity with lockable X/Y axis
- Advanced Professional Macro-Micro X/Y PCB Table (Optional)**
 Precision micrometer (micro) X/Y and micro rotation control
 +/- 10 microns (.0004") movement in X/Y directions
 Macro movement in X/Y directions
 Up to 12" x 18" (300mm x 450mm) PCB capacity with lockable X/Y axis
- Camera/Prism Based BGA/CSP/QFN Alignment System**
 Split beam prism system for simultaneous PCB/component viewing
 Integral LED lighting system with illumination level control
 Full colour compact camera and flat screen colour monitor
 High quality zoom lens with up to x50 magnification
 Precise X/Y axis mounting system
- Auxiliary Process Camera (Optional)**
 Auxiliary process observation camera
 Integral LED lighting system with illumination level control
 Full colour compact camera with rotation movement
 High quality zoom lens with up to x50 magnification
- Component Temperature Sensing - Non-contact, IR Sensor (Optional)**
 Manually adjustable, K-type non-contact IR sensor, Ø7-10mm spotsize
 Real time monitoring of component temperature throughout process
- PCB Temperature Sensing**
 Manually attached K-type wire thermocouple
 Optional non-contact IR sensor with real time temperature sensing

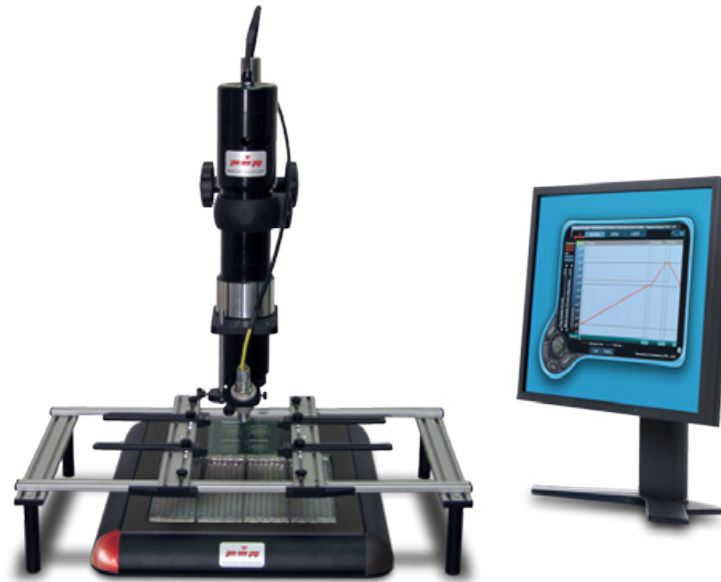
Bench Top Requirements

Top heat power	150W IR
Back heater power	1600W or 2000W IR
Voltage/frequency	208-240 volts 50/60Hz, up to 3KW
Typical components	CSPs, BGAs, uBGAs, QFNs, QFPs, PLCCs, SOICs, small SMDs
Bench area	1400mm (w) x 600mm (d)
Weight	65 Kg

The above features are mostly optional and also, PDR reserves the right to improve or change specifications without giving notice.



Focused IR SMT/BGA Rework Systems

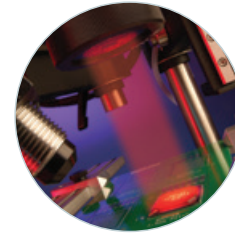


PDR's Entry-Level SMT/BGA Rework Station

PDR IR-C3 Chipmate Series BGA Rework Station

Advanced features:

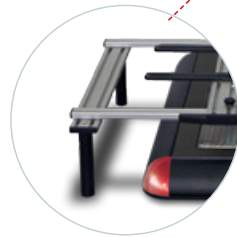
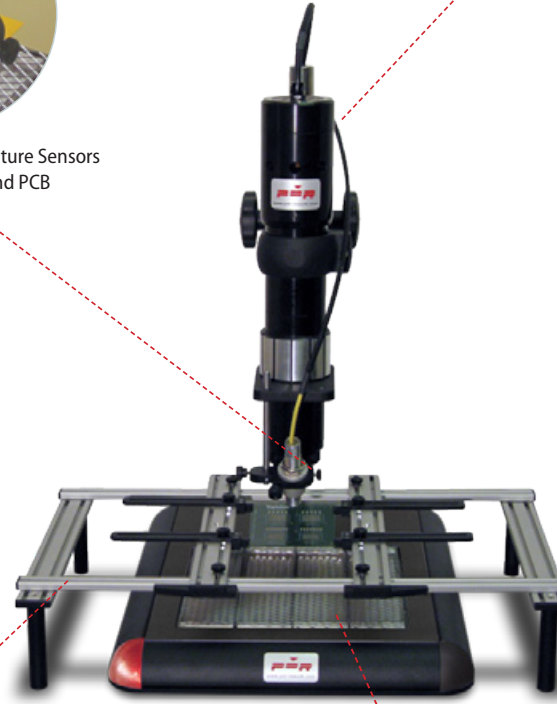
- **Advanced Focused IR component heating**
150W, lens based Focused IR heating with adjustable image system
- **Quartz IR PCB preheating**
2000W, single zone (240mm x 240mm heating area)
- **Precision Component Pick and Placement**
Handheld vacuum placement system
- **Precision PCB Handling**
Portable Benchtop PCB workholder
- **Component Temperature Sensing**
Standard non-contact IR temperature sensor
- **PCB Temperature Sensing**
K-type wire thermocouple
- **Advanced Thermal Process Control**
Digital (C3) or Software (C3i) based auto profile thermal control



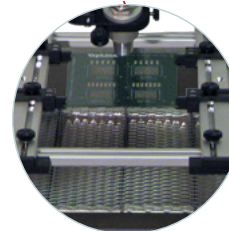
150w Focused IR Component Heating



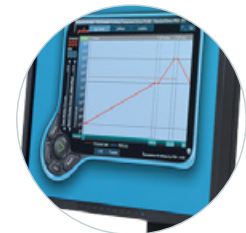
Non Contact IR Temperature Sensors
for Component and PCB



Portable Benchtop PCB workholder



2000W, single zone
(240mm x 240mm heating area)



Digital (C3) or Software (C3i) based auto
profile thermal control

Low Cost, Upgradeable BGA Rework Station

Today there is a need for lower cost and upgradeable equipment without a loss in soldering quality. The PDR IR-C3 and IR-C3i Chipmate SMT/BGA rework stations, using PDR's patented Focused IR technology, have been specifically engineered to meet this challenge.

The IR-C3/C3i Chipmate comes with a good range of standard features allowing the operator to quickly, safely rework all types of components.

The station is tool free, gas free, instantly/precisely controllable, clean, modular and produces 100% yield BGA rework without any complications. The IR-C3/C3i uses all the proven attributes of PDR's Focused IR technology, first introduced in 1987 and now used worldwide by over 4500 customers.

Simple BGA rework procedure

BGA rework poses the problem of accessing hidden interconnects in a high density environment. Consequently, it requires a station that is able to access the hidden joints without affecting neighbouring components. A station that is safe, gentle, adaptable and, above all, simple to operate.

The IR-C3 Chipmate is such a station. It is so easy to operate that technicians are able to instantly achieve excellent process control for BGA/SMT rework without the complexities and frustrations normally associated with 'high end' rework stations.

The IR-C3's standard features, with the use of simple aids, operators can simply pick up the BGA, align it, place it into fluxed pads and reflow with the station's accurate closed-loop component temperature control.

Details and specifications of advanced features available

- **Advanced Focused IR component heating**
150W, lens based Focused IR heating with adjustable image system
PDR lens attachments with IR image from 4 to 70mm diameter
Reworks SMDs/ BGAs/QFNs/CSFs + lead free applications
- **PDR lens attachments**
F150 (Ø4 - 18mm spot size) optional
F200 (Ø10 - 28mm spot size) optional
F400 (Ø12 - 35mm spot size) optional
F700 (Ø25 - 70mm spot size) standard
- **Quartz IR PCB preheating**
High power, medium wave quartz IR
Large area IR PCB preheater system
2000W, single zone (240mm x 240mm heating area)
Optional 750W, single zone (120mm x 120mm heating area)
- **Handheld Vacuum Placement System**
Vacuum operated pick up tool, hand held with silicon cups
- **Standard Vacuum Placement System (Optional)**
With precise placement action, Z axis movement and rotation
Interchangeable pick-up heads for different application
- **Handheld Component Nest and Flux Application Tool (Optional)**
Handheld nest plate with 'component print frame' or dip tray for flux and solder paste application
- **Portable Benchtop PCB Workholder**
650mm, up to 12" x 10" (300mm x 250mm) PCB capacity
- **Component Temperature Sensing - Non-contact, IR Sensor**
Manually adjustable, K-type non-contact IR sensor, Ø7-10mm spot size
Real time monitoring of component temperature throughout process.
- **PCB Temperature Sensing - Non-contact, IR Sensor (Optional)**
Manually adjustable, K-type non-contact IR sensor, Ø7-10mm spot size
Real time monitoring of component temperature throughout process
- **Digital, Closed-loop Electronic Control (IR-C3)**
Digital programmable controller (20 internal profile storage)
Simple key pad setting power/time/temperature controls
2 Channel component and PCB temperature control
- **Auto Profile Process Control Software (IR-C3i)**
Advanced PDR ThermoActive software suite, Windows 7+
Digital controller with multi-functional features
Two channel, real time, closed loop component and PCB temperature control
'Auto-profile' temperature profiling, data logging and reporting
Optional PC System with 17-23-27" Monitor Selection

Bench Top Requirements

Top heat power	150W IR
Back heater power	2000W IR
Voltage/frequency	110-240 volts 50/60Hz
Typical components	CSFs, BGAs, uBGAs, QFNs, QFPs, PLCCs, SOICs, small SMDs
Bench area	1200mm (w) x 600mm (d)
Weight	45 Kg

The above features are mostly optional and also, PDR reserves the right to improve or change specifications without giving notice.

PDR

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PDR's products are available worldwide via our international distributors, all offering professional sales and support.

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