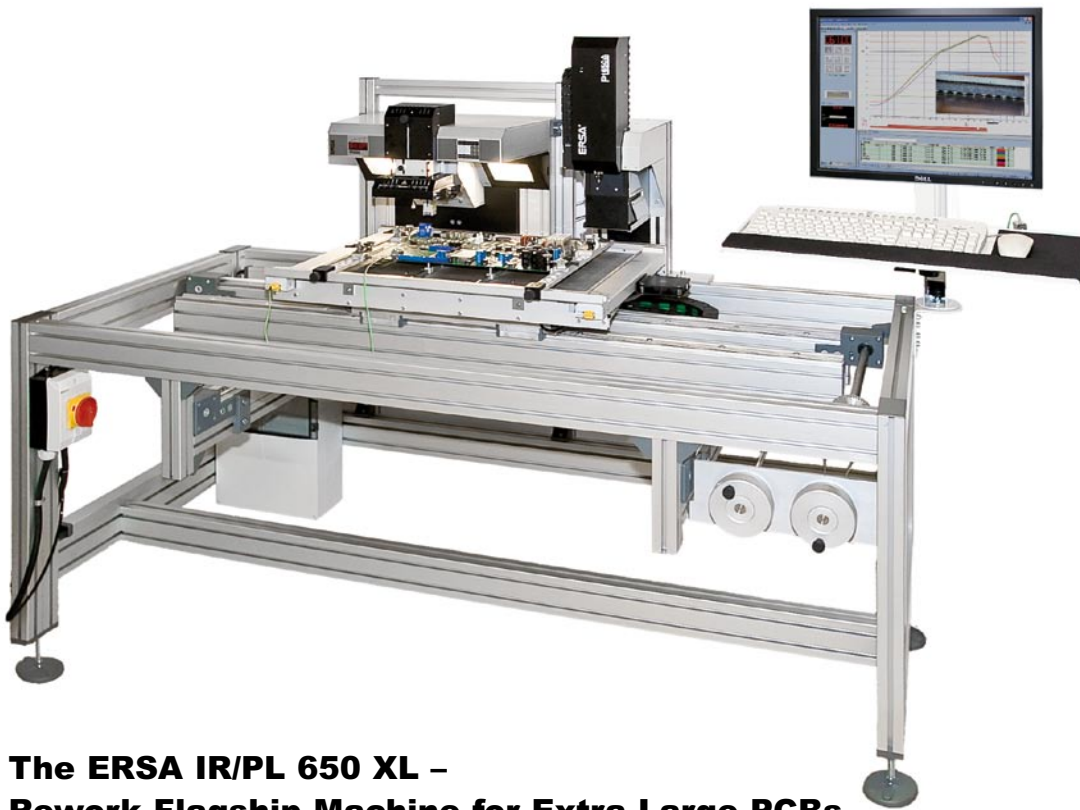


DATA

# ERSA IR/PL 650 XL

**The World's Most Powerful and Flexible  
Big Board REWORK MACHINE!**



## **The ERSA IR/PL 650 XL – Rework Flagship Machine for Extra Large PCBs**

For today's rework operators working on large PCBs, one truth remains constant – the rework difficulty increases with the size of the PCB! From a profitability standpoint, reworking large PCBs represents a tremendous risk due to the very high PCB price. One failed rework procedure could destroy a PCB thereby losing the high material costs and follow-on profits!

With over 5,000 IR rework systems installed worldwide, ERSA is one of the major players in the industry. ERSA was given the challenge by one of the world's largest EMS companies to design an optimal large board rework machine to safely handle the toughest applications. ERSA is now proud to introduce its flagship machine for extra large PCBs, the ERSA IR/PL 650 XL.

PCBs up to 20" x 24" or 500 mm x 625 mm can now be safely and rapidly reworked using one of the industry's largest & most powerful bottom side heaters – an 8,000 W medium wavelength IR heater measuring 500 mm x 625 mm! Total system power is 9,200 W!

These extra powerful bottom & top heaters are necessary for large boards, especially for those which are thicker than 3 mm. Unless the entire board area is efficiently preheated from the bottom, such boards show the tendency of bending and warping during the rework procedure. Divided into 5 separately controllable bottom side heating zones and 4 top side zones, the operator on the IR/PL 650 XL can individually set the power supply to each zone in order to find the optimal preheating conditions to minimize damage via board warpage.

In addition to the total size & power of the bottom heater, an important factor is the position of the PCB over the bottom heater. The IR/PL650 XL has a completely redesigned PCB holder table which exposes the entire PCB to the heater area.

No matter where the component to be repaired is located on the board, the entire PCB is preheated! No cold spots means less warping!



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The large PCB table design guarantees that all shapes of boards are carried in an optimal manner. Top- and bottom side support rails are easy to insert and adjustable to the actual rework task within minutes. The table includes a 45° butterfly mechanism to lift the entire PCB while it is inserted in the holder and thus provides easy access to the bottom side. The operator can easily attach thermo probes on the bottom side, position the support pins or carry out other “down under” operations like shielding heat sensitive components.

Finally, the IR/PL 650 XL has taken a completely new approach to cooling as the larger PCBs require a higher cooling volume. Similar

to ERSA's wave soldering machines, this rework machine has a new & highly efficient compressed air cooling system.

Using an air tube which extends the entire length of the bottom side heater, laminar flow cooling takes place via very fine air outlets. The air flow rate can be adjusted for a faster or slower cooling gradient.

The bottom line is simple: investing in large board rework equipment specifically designed for the toughest applications will save money in rework scrap reduction. The ERSA IR/PL 650 XL is currently the world's most powerful and flexible big board rework system!

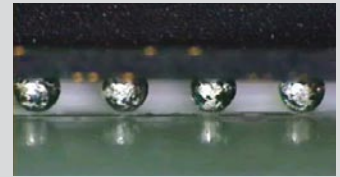
## Ordering information:

0IRPL650A-XL                      Semiautomatic IR Rework System

## Technical Data:

Dimensions L x W x H:	1,900 x 840 x 1,490 mm (~75 x 33 x 39 inch)
Working height (PCB level):	950 mm +/- 50 mm, adjustable (~37 inch)
Working depth:	550 mm (front to pipette position) (~22 inch)
Power supply:	3 x 400 V N/PE, 50/60Hz, 16 A
Compressed air supply:	6 to 10 bar (oil free), ¼ inch quick connector
Installed heating power:	9,200 W
Top heater size:	60 x 120 mm (2.5 x 5 inch), 4 separate heating zones
Bottom heater size:	500 x 625 mm (~20 x 24 inch), 5 separate heating zones
Distance top heater to PCB:	60 mm (2.5 inch)
Distance bottom heater to PCB:	30 mm (1.2 inch)
Temperature sensor channels:	1 x infrared sensor, 4 x k-type thermocouple (potential free)
Maximum component size PL:	60 x 60 mm (2.5 x 2.5 inch)
Placement accuracy:	+/- 0.025 mm
Placement force:	1.0 – 3.0 N (vacuum switching point)
Control:	via PC with IRSOFT, USB 2.0
Operating Systems:	Windows XP® or Windows Vista®

Features for the IR, PL and RPC modules are identical to the well known IR / PL 650. Details as well as recommended accessories can be found online at [www.ersa.com](http://www.ersa.com).



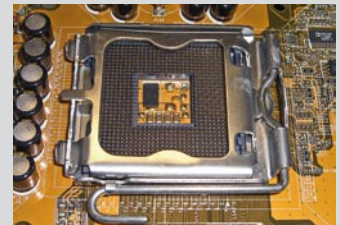
The RPC camera visualizes the rework process for increased safety



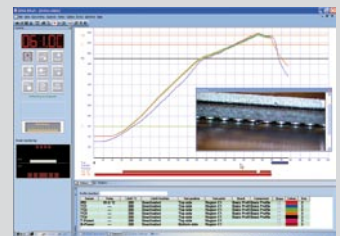
Hundreds of IR/PL 650 systems have proven themselves as easy to operate



Heavy mass components on heavy mass, big boards can be reworked



Metal shields, sockets and components are easily handled



IRSOFT software is ERSA's user-friendly rework software platform



**ERSA**  
GLOBAL CONNECTIONS