

Precise, automatic iron soldering with highest precision!



Ersa SR 500 – automatic iron soldering

Precise, automatic iron soldering with highest precision! The Ersa SOLDER SMART SR 500 works with the powerful i-TOOL, which has proven itself thousands of times in industry. Its heating power of 150 W allows fast soldering processes at stable soldering temperatures and the use of very fine soldering tips from 0.4 mm up to wide tips of up to 5 mm and more!

The Ersa SOLDER SMART has a high-precision and low-maintenance axis system. Its X-Y portal opens a large working range of 500 x 400 mm. The soldering robot has two separate Z-axes for precise and almost powerless positioning of the soldering tip. In addition, each soldering point can be approached from any direction with the aid of a rotary axis. For optimized throughput, the unit is equipped with two automatically locking drawers.

The system allows the programming of single solderings, the flow soldering with pre-soldered soldering tip at contact distances, as well as

the soldering of recurring groups (with several, same connectors or PCB panels) or the drag soldering (line soldering). Solder wire feed, pre-heating and soldering times can be precisely adapted to the soldering heat requirements of each solder joint.

The soldering tip is cleaned with rotating brushes, cleaning intervals can be set individually. For setup and process monitoring the SOLDER SMART is equipped with a USB camera, which offers highest detail accuracy.

The system is designed for the connection of an Ersa EASY ARM 1 solder fume extraction system. The solder fume is extracted close to the soldering point.

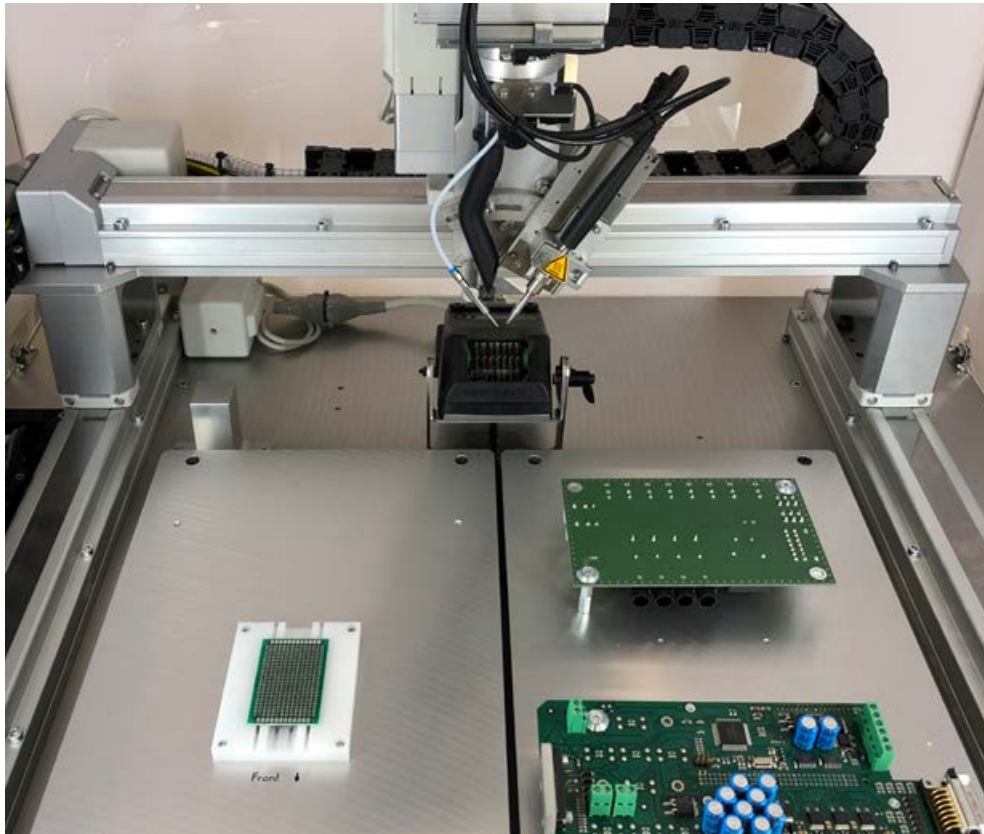
The compact table-top unit cell is equipped with a protective hood to ensure safe operation and to protect the system from contamination. An LED illumination is integrated for an even illumination of the working area.

Technical Highlights

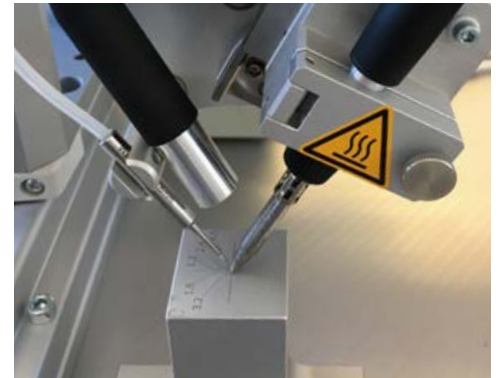
- High-quality 150 W soldering iron Ersa i-TOOL
- Axis accuracy ± 0.02 mm
- Self-locking exchangeable drawers
- Automatic soldering tip measurement (height)
- Spot soldering & line soldering – drag soldering
- Flow soldering – soldering with pre-tinned soldering tip
- Electric soldering iron movement = no mechanical stress for the PCB
- Automatic loading of soldering programs with optional hand scanner
- Precise, reliable solder wire feeder
- Complete process monitoring, built-in PC, software pre-installed

The operating software (for Windows™) is pre-installed on the integrated PC and supports the user in all work processes and also realizes process documentation.

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Soldering applications in the SOLDER SMART drawers



Powerful i-TOOL with defined solder wire feeder



Precise, easily programmable axis system

Technical data

Dimensions (W x D x H)	880 x 880 x 830 mm (with hood)
Weight:	approx. 100 kg
Antistatic design:	yes (hood not antistatic)
Power rating:	max. 1,500 W
Supply voltage:	200 – 230 V / 50 – 60 Hz, max. 6 A 100 – 120 V / 50 – 60 Hz, max. 6 A
Soldering system:	Ersa i-CON 1 with 150 W soldering iron
Axis accuracy:	±0,02 mm
Component size in mm:	all common THT components
Work surface:	500 x 400 mm (without drawers)
Work surface (per drawer):	approx. 240 x 382 mm
Camera:	5 MP USB color camera, resolution (2,592 x 1,944 px)
Test symbol:	CE
Operating software:	suitable for Windows 8 and Windows 10

Ordering information

Article number	Description
OSR500	Ersa SOLDER SMART SR 500 soldering robot for automatic iron soldering



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