

## EKRA E4

The world smallest high-end printer. With a maximum board size of 350 x 350 mm, the E4 has been specially developed for applications with medium-sized and small boards.

Because of the compact construction, the E4 only takes up 1,17m<sup>2</sup> foot print.

The E4 saves space while boosting productivity per square metre.

A full-range of options are available for this printer.

<b>E4</b>	
<b>PCB Handling</b>	
PCB size	min.: 80 x 50 mm max.: 350 x 350 mm
PCB thickness	0,5 - 6 mm
PCB clearance underside	23 mm
PCB clearance top and bottom side	2,5 mm, needed for PCB transport & clamping 0 mm for top side using side clamping
PCB transport height	830 - 950mm
PCB support	magnetic support pins and bars, optional:dedicated workholder universal printnest
PCB hold down	PCB clamping with knife edge from top or side clamping, optional: vacuumnest
PCB transport direction	left-> right, right--> left, left-> left, right--> right, pass through
Conveyor configuration	front or rear fix
PCB transport width adjustment	motorised, software controlled
PCB warpage	1% of PCB diagonally, up to a max. of 11 mm including PCB thickness
Stencil size	300 x 300 mm, up to, 737 x 737 mm
Frame thickness	25 - 40 mm, adjustable without adapter single

Number transport system	single
<b>Print parameter</b>	
Print area	max.: 350 x 350 mm
Print speed	5 - 199 mm / sec.
Print head	two independent pneumatic printheads, closed loop system, self leveling squeegees
Print pressure	0 - 240 N
Snap-off speed	0,2 - 10 mm / sec.
Snap-off distance	0 - 3 mm
Snap-off	-2 - +6 mm
PCB alignment	x/y: $\pm 4$ mm, Theta: $\pm 2^\circ$
<b>Vision System</b>	
Fiducials	2 - 4 fiducials or any shape on PCB Layout
Fiducial size	0,7 - 3 mm <sup>2</sup>
Camera	EVA™ Vision system with 2 CCD Cameras
Camera field of view	10 x 8 mm
Fiducial position	inside print area
Fiducial Teach	Patented teach in method
<b>Performance</b>	
Alignment repeatability	12,5 $\mu$ m at 6 Sigma
Alignment accuracy	25 $\mu$ m at 6 Sigma
Cycle time	< 12 sec. plus print
Set-Up	< 5 min.
Product changeover	< 3 min.
<b>General Data</b>	
Power requirements	110/230 V 50/60 Hz, 1 KW
Air supply requirements	4 - 6 bar, with vacuum cleaning 5,5 l/sec
<b>Dimensions</b>	
Width	975 mm
Depth	1200 mm
Height	1400 mm
Weight	600 kg appr.