

# A8 *plus* Flying Probe Test System

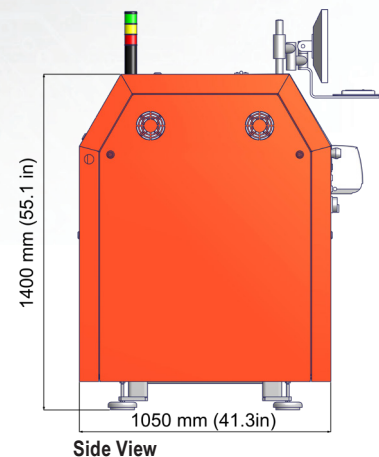
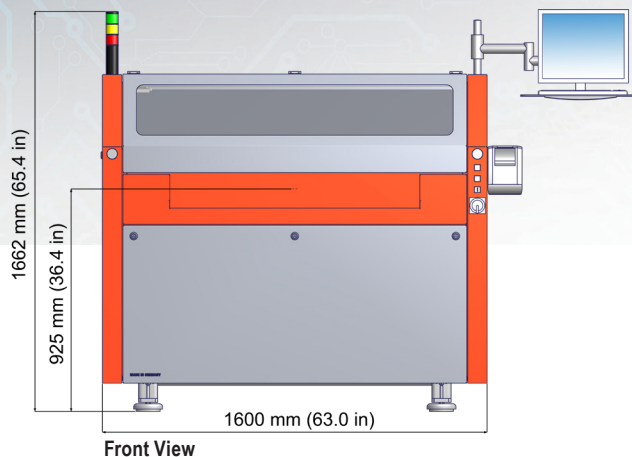
## For Substrate Boards



- ▲ 8 Test Heads
- ▲ High Speed Direct Linear Drives for X and Z motion
- ▲ Light weight Carbon Z-Axis
- ▲ 4 High Resolution Color Cameras
- ▲ Fast 300 mA Kelvin Testing

# A8 plus Technical Specifications

## Flying Probe Test System



### Mechanics

Basic unit with 8 probes (4 top, 4 bottom)  
Universal shuttle system with clamp and stretch mode for testing substare boards.  
Pneumatic clamping function controlled by foot switch.

Max. board size (X x Y)	640 mm x 610 mm / 25.2" x 24.0"
Min. board size (X x Y)	10 mm x 10 mm / 0.4" x 0.4"
Test area (X x Y)	610 mm x 310 mm / 24.0" x 12.2"

Board thickness	up to 2 mm / 0.1"
Smallest pad	25 $\mu\text{m}$ / 1.0 mil* (special setup)
Smallest pitch	50 $\mu\text{m}$ / 2.0 mil

Board thickness	up to 4 mm / 0.2"
Smallest pad	25 $\mu\text{m}$ / 1.0 mil (Bottom side) 50 $\mu\text{m}$ / 2.0 mil (Top side)

\* Different board thickness on customer request

Resolution measurement system	$\pm 0.1 \mu\text{m}$ / $\pm 0.004 \text{ mil}$
Repeatable accuracy	$\pm 3 \mu\text{m}$ / $\pm 0.12 \text{ mil}$

Soft touch probes or *Micro needle probes	5 g to 10 g 0.3 g to 2.5 g
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### Electronics

Continuity test	1 $\Omega$ to 10 k $\Omega$
Isolation test	up to 25 M $\Omega$ (FM) up to 100 G $\Omega$ (ohmic) MicroShort Detection <sup>®</sup>
Test voltage	100 mV to 1000 V

### Camera System

4 high resolution color cameras for fast optical scanning of top and bottom side.  
Resolution 3  $\mu\text{m}$ / pixel

### Options

- 4-wire measurement with max. 300 mA test current  
0  $\Omega$  to 1 k $\Omega$   $\pm 2 \%$ , min  $\pm 25 \mu\Omega$   
with FP Kelvin probes 0.3 g to 2 g  
Smallest pad 50  $\mu\text{m}$  / 2.0 mil\*  
Smallest pitch 100  $\mu\text{m}$  / 4.0 mil\*  
\* special setup
- Embedded components test  
R 0  $\Omega$  to 1 M $\Omega$   $\pm 1 \%$ , min.  $\pm 0.5 \Omega$   
1 M $\Omega$  to 200 M $\Omega$   $\pm 3 \%$   
C 0 F to 100  $\mu\text{F}$   $\pm 2 \%$ , min.  $\pm 30 \text{ fF}$   
L 0 H to 10 mH  $\pm 5 \%$ , min.  $\pm 0.25 \mu\text{H}$   
Diode / Varistor  
 $U_{\text{F}}$ ,  $U_{\text{R}}$ ,  $U_{\text{BR}}$  0 V to 12.5 V
- LaTest<sup>®</sup> open detection  
with LaTest<sup>®</sup> probes 1 g to 10 g  
High current 1.4 A (1 kHz)
- Retest of fault files from external grid test systems on inquiry
- Repair software with barcode support

Data input format	IPC-D-356A
Network connection	Ethernet, TCP / IP
Power supply	3 x 400 V, 50 Hz (3 x 208 V, 60 Hz), 1500 VA
Compressed air	8 bar / 115 psi, filtered
Temperature	18 $^{\circ}\text{C}$ to 27 $^{\circ}\text{C}$
Relative humidity	40 % to 60 %
Machine weight	800 kg

All information subject to change without notice!  
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