

# A9 Flying Probe Test System

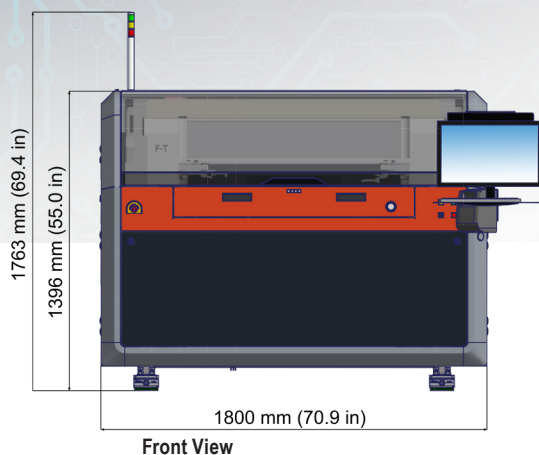
For Rigid and Flexible Boards



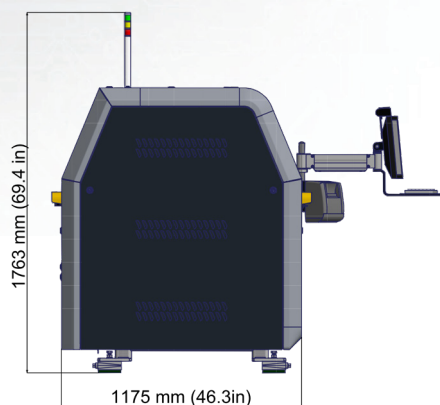
- ▲ Latest Generation in advanced technology
- ▲ 8 ultra light carbon fiber test heads
- ▲ High performance linear motion
- ▲ Granit base for high accuracy and repeatability

# A9 Technical Specifications

## Flying Probe Test System



Front View



Side View

### Mechanics

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

Max. board size (X x Y)	640 mm x 535 mm / 25.2" x 21.0"
Min. board size (X x Y)	10 mm x 10 mm / 0.4" x 0.4"
Test area (X x Y)	610 mm x 510 mm / 24.0" x 20.0"
Board thickness	up to 10 mm / 0.4"

Smallest pad	35 $\mu\text{m}$ / 1.4 mil* (special setup)
Smallest pitch	75 $\mu\text{m}$ / 3.0 mil
Resolution measurement system	$\pm 0.1 \mu\text{m}$ / $\pm 0.004 \text{ mil}$
Repeatable accuracy	$\pm 4 \mu\text{m}$ / $\pm 0.16 \text{ mil}$

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

### 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 color cameras for fast optical scanning of top and bottom side.  
 Resolution 6  $\mu\text{m}$ / pixel

### Options

- 4-wire measurement with max. 280 mA test current
  - 0  $\Omega$  to 1 k $\Omega$   $\pm 2 \%$ , min  $\pm 25 \mu\Omega$
  - with Kelvin probes 0.3 g to 2.5 g
  - Smallest pad 80  $\mu\text{m}$  / 3.2 mil\*
  - Smallest pitch 120  $\mu\text{m}$  / 4.8 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
  - High current 1 g to 10 g
  - 1.4 A (1 kHz)

- Retest of fault files from external grid test systems on inquiry
- Repair software with barcode support

<b>Data input format</b>	IPC-D-356A
<b>Network connection</b>	Ethernet, TCP / IP
<b>Power supply</b>	230 V, 50 Hz (115 V, 60 Hz), 1000 VA
<b>Compressed air</b>	8 bar / 115 psi, filtered
<b>Temperature</b>	18 $^{\circ}\text{C}$ to 27 $^{\circ}\text{C}$
<b>Relative humidity</b>	40% to 60%
<b>Machine weight</b>	1450 kg

All information subject to change without notice!  
 April 2024