

A9 *plus* Flying Probe Test System

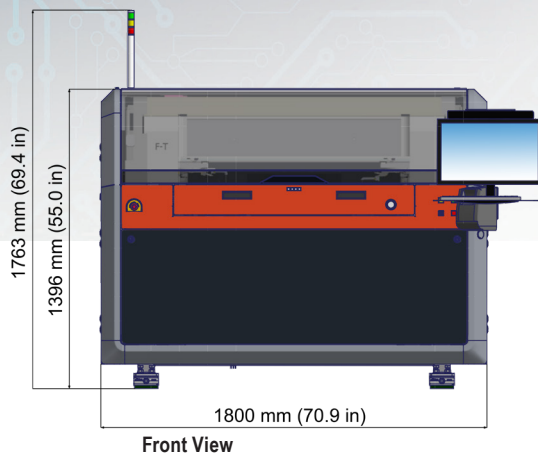
For HDI and Substrate Boards



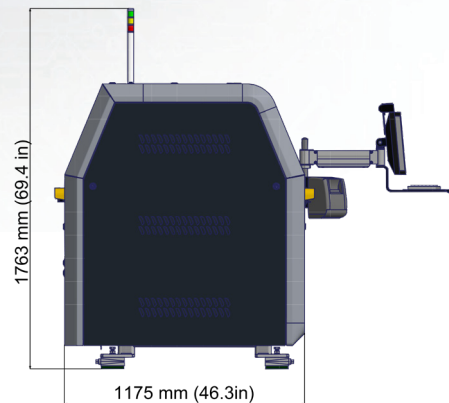
- ▲ Latest Generation in advanced technology
- ▲ 8 ultra light carbon fiber test heads
- ▲ High performance linear motion
- ▲ Granit base for high accuracy and repeatability

A9 plus 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 HDI and substrate 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"

	high resolution	mixed cameras
Smallest pad	25 μ m / 1.0 mil*	35 μ m / 1.4 mil (top) 25 μ m / 1.0 mil* (bottom)
Smallest pitch	50 μ m / 2.0 mil	75 μ m / 3.0 mil (top) 50 μ m / 2.0 mil* (bottom)
Board thickness	up to 2 mm / 0.08"	up to 4 mm / 0.16"

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

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

Electronics

Continuity test	1 Ω to 10 k Ω
Isolation test	up to 25 M Ω (FM) up to 100 G Ω (ohmic) MicroShort Detection®
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 μ m/ pixel
or
2 high resolution color cameras of bottom side, Resolution 3 μ m/ pixel and
2 standard color cameras for top side, Resolution 6 μ m/ pixel for fast optical scanning

Options

- 4-wire measurement with max. 280 mA test current
0 Ω to 1 k Ω ± 2 %, min $\pm 25 \mu\Omega$
with Kelvin probes 0.3 g to 2.5 g
- Smallest pad high resolution 50 μ m / 2.0 mil* mixed cameras 80 μ m / 3.2 mil (top)
50 μ m / 2.0 mil* (bottom)
- Smallest pitch 80 μ m / 3.2 mil* 120 μ m / 4.8 mil (top)
80 μ m / 3.2 mil* (bottom)

* special setup

- Embedded components test
R 0 Ω to 1 M Ω ± 1 %, min. $\pm 0.5 \Omega$
1 M Ω to 200 M Ω ± 3 %
C 0 F to 100 μ F ± 2 %, min. ± 30 fF
L 0 H to 10 mH ± 5 %, min. $\pm 0.25 \mu$ H
Diode / Varistor
 U_F, U_R, U_{BR} 0 V to 12.5 V

- BackDrill Stripe detection

- 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	19 °C to 23 °C
Relative humidity	40 % to 60 %
Machine weight	1450 kg

All information subject to change without notice!
July 2025