

A7 Pro Flying Probe Test System

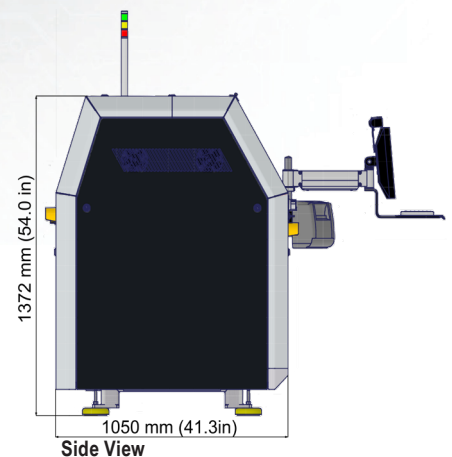
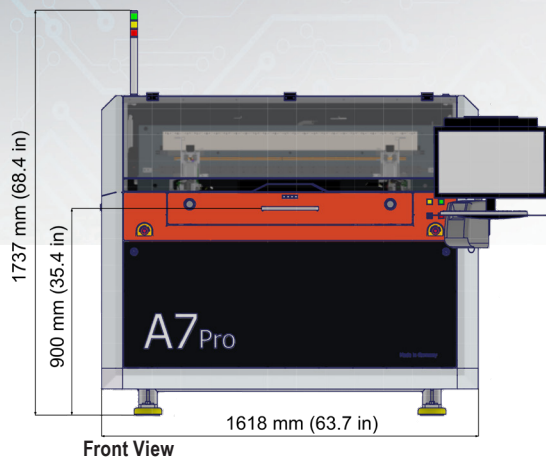
For Rigid and Flexible Boards



- ▲ 8 Test Heads
- ▲ 20 % higher mechanical speed than A7
- ▲ Light weight Carbon Z-Axis
- ▲ 4 High Resolution Color Cameras
- ▲ Fast 280 mA Kelvin Testing

A7 Pro 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 flexible and rigid 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 510 mm / 24.0" x 20.0"
Board thickness	up to 10 mm / 0.4"

Smallest pad	35 μ m / 1.4 mil* (special setup)
Smallest pitch	100 μ m / 4.0 mil
Resolution measurement system	$\pm 0.1 \mu$ m / ± 0.004 mil
Repeatable accuracy	$\pm 4 \mu$ m / ± 0.16 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 color cameras for fast optical scanning of top and bottom side.
Resolution 6 μ m/ pixel

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 80 μ m / 3.2 mil*
 - Smallest pitch 120 μ m / 4.8 mil*
 - * 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

- LaTest® open detection
 - with LaTest® 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	230 V, 50 Hz (115 V, 60 Hz), 1000 VA
Compressed air	8 bar / 115 psi, filtered
Temperature	18 °C to 27 °C
Relative humidity	40 % to 60 %
Machine weight	800 kg

All information subject to change without notice!
May 2025