

A7-16 Pro Flying Probe Test System

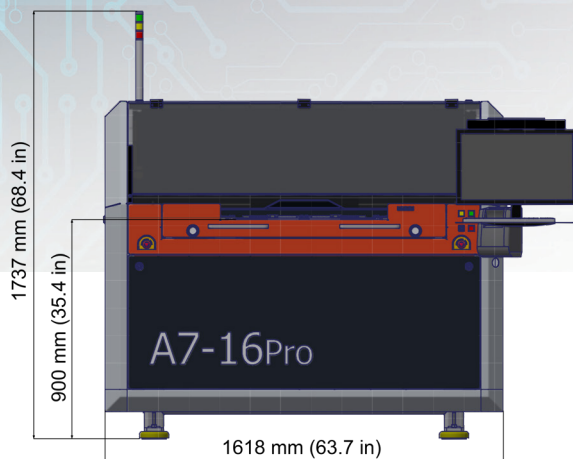
For Oversized Rigid Boards



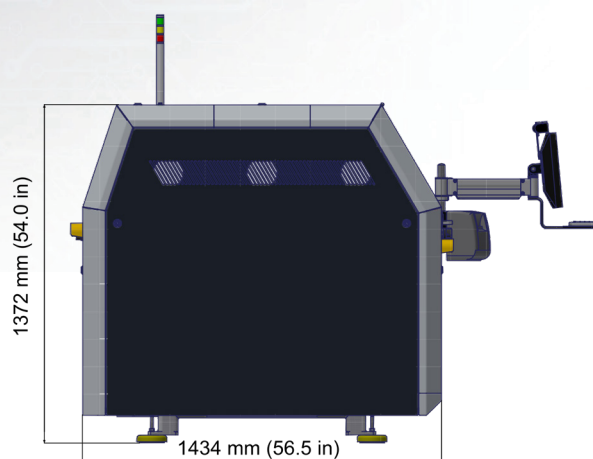
- ▲ 16 Test Heads
- ▲ 20 % higher mechanical speed than A7-16
- ▲ Light weight Carbon Z-Axis
- ▲ Test System for oversized panels up to 1000 mm
- ▲ Fast 280 mA Kelvin Testing

A7-16 Pro Technical Specifications

Flying Probe Test System



Front View



Side View

Mechanics

Basic unit with 16 probes (8 top, 8 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)	610 mm x 1050 mm / 24.0" x 41.4"
Min. board size (X x Y)	50 mm x 50 mm / 2.0" x 2.0"
Test area (X x Y)	610 mm x 1000 mm / 24.0" x 39.4"
Board thickness	up to 10 mm / 0.4"

Smallest pad	50 μ m / 2.0 mil
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	5 g to 10 g
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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

8 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 $\pm 2 \%$, min $\pm 25 \mu\Omega$
with Kelvin probes 0.3 g to 2.5 g
Smallest pad 100 μ m / 4.0 mil*
Smallest pitch 150 μ m / 6.0 mil*

- Embedded components test
R 0 Ω to 1 M Ω $\pm 1 \%$, min. $\pm 0.5 \Omega$
1 M Ω to 200 M Ω $\pm 3 \%$
C 0 F to 100 μ F $\pm 2 \%$, min. ± 30 fF
L 0 H to 10 mH $\pm 5 \%$, min. $\pm 0.25 \mu$ H
Diode / Varistor
 U_{F1} U_{R1} 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), 1500 VA
Compressed air	8 bar / 115 psi, filtered
Temperature	18 °C to 27 °C
Relative humidity	40 % to 60 %
Machine weight	1200 kg

All information subject to change without notice!
May 2025