

# A7-16 XW Flying Probe Test System

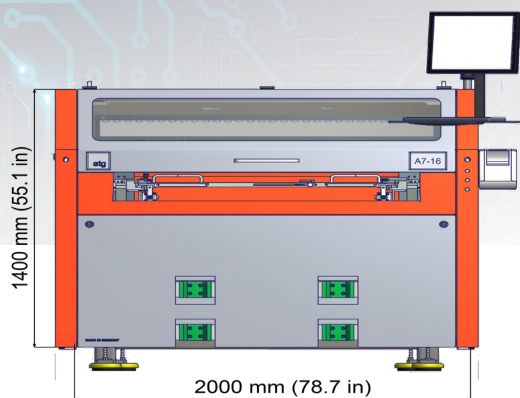
## For Oversized Rigid and Flexible Boards



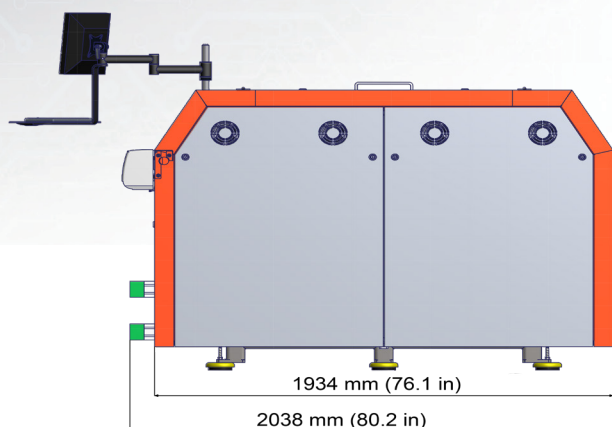
- ▲ 16 Test Heads (Upgrade to max 24 test heads possible)
- ▲ High Speed Direct Linear Drives for X and Z motion
- ▲ Light weight Carbon Z-Axis
- ▲ Test System for oversized panels up to 1003 mm (Optional 1500 mm)

# A7-16 XW 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 mode for testing rigid boards.

Max. board size (X x Y)	1100 mm x 1220 mm / 43.3" x 48.0" (Optional 1100 mm x 1550 mm / 43.3" x 61.0")
Min. board size (X x Y)	190 mm x 150 mm / 7.5" x 5.9"
Board thickness	up to 12 mm / 0.47"
Test area (X x Y)	1016 mm x 1003 mm / 40.0" x 39.5" (Optional 1016 mm x 1500 mm / 40.0" x 59.1")
Smallest pad	100 $\mu\text{m}$ / 4.0 mil
Smallest pitch	200 $\mu\text{m}$ / 8.0 mil
Resolution measurement system	$\pm 0.1 \mu\text{m}$ / $\pm 0.004 \text{ mil}$
Repeatable accuracy	$\pm 7.5 \mu\text{m}$ / $\pm 3.0 \text{ mil}$
Soft touch probes	5 g to 10 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®
Test voltage	100 mV to 1000 V

### Camera System

8 color cameras for fast optical scanning of top and bottom side with high resolution (1024 x 768 px)

### Options

- 4-wire measurement with max. 300 mA test current
  - 0 m $\Omega$  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  $U_{EP}$ ,  $U_{R1}$ ,  $U_{BR}$  0 V to 12.5 V
- 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 °C to 27 °C
Relative humidity	40% to 60%
Machine weight	2010 kg

All information subject to change without notice!  
September 2021