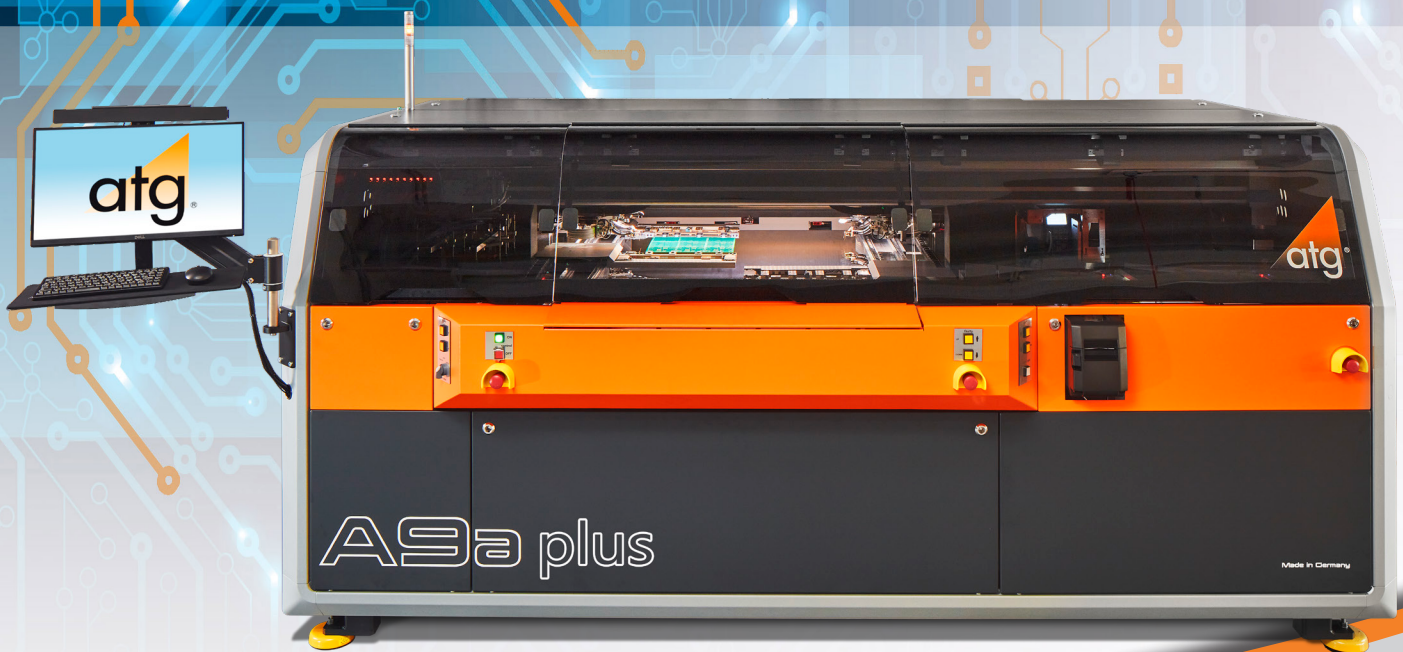


A9a *plus* Flying Probe Test System Dual Shuttle

Automated Test for Substrates and Substrate like PCB

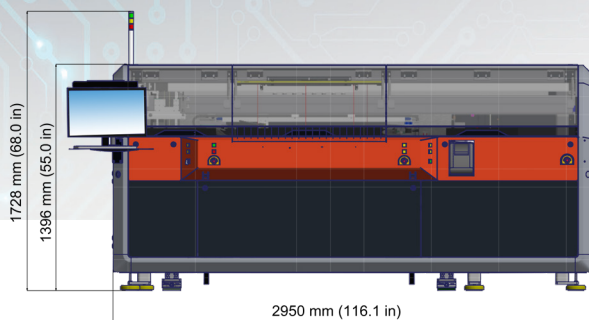


- ▲ Latest Generation in advanced technology
- ▲ 8 ultra light carbon fiber test heads
- ▲ Fully Automatic “Lights-out” operation
- ▲ High performance linear motion
- ▲ Granit base for high accuracy and repeatability

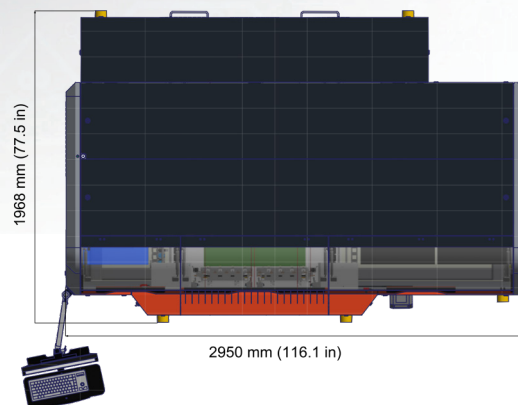
A9a plus Technical Specifications

Dual Shuttle

Flying Probe Test System



Front View



Plan View

Mechanics

Fully automated test system for medium batch sizes in lights-out operation.
Basic unit with 8 test probes (4 top, 4 bottom)

Board Handling

Automation mode:

Max. board size (X x Y) 510 mm x 420 mm / 20.0" x 16.5"

Test area (X x Y) 510 mm x 420 mm / 20.0" x 16.5"

Manual mode:

Max. board size (X x Y) 610 mm x 535 mm / 24.0" x 21.0"

Test area (X x Y) 610 mm x 510 mm / 24.0" x 20.0"

Min. board size (X x Y) 50 mm x 40 mm / 2.0" x 1.6"

Board thickness up to 1.6 mm, max. 2 kg

Product exchange time 0 s with dual shuttle mode,
for test area max. 300 mm x 330 mm

Loader capacity 390 mm
240 boards / 1.6 mm thickness

Smallest pad 30 μ m / 1.2 mil

Smallest pitch 60 μ m / 2.4 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

*Micro needle probes 0.3 g to 2.5 g

Electronics

Continuity test 1 Ω to 10 k Ω (2-wire)

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/ pixe

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 $\pm 2 \%$, min. $\pm 25 \mu\Omega$

with Kelvin probes 0.3 g to 2.5 g

Smallest pad 60 μ m / 2.4 mil*

Smallest pitch 100 μ m / 4.0 mil*

* special setup

• 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 (on inquiry)

U_F , U_R , U_{BR} 0 V to 12.5 V

Structural test of integrated circuits:

opens/shorts test on CMOS devices with ESD diodes

• BackDrill Stripe detection

• LaTest® open detection

• Label printer with barcode support

• Pen marker

• Retest of fault files from external grid test systems on inquiry

• Repair software with barcode support

• Tensioning modules for flexible board thickness 0,05 mm to 1.0 mm

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 2500 kg

All information subject to change without notice!

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