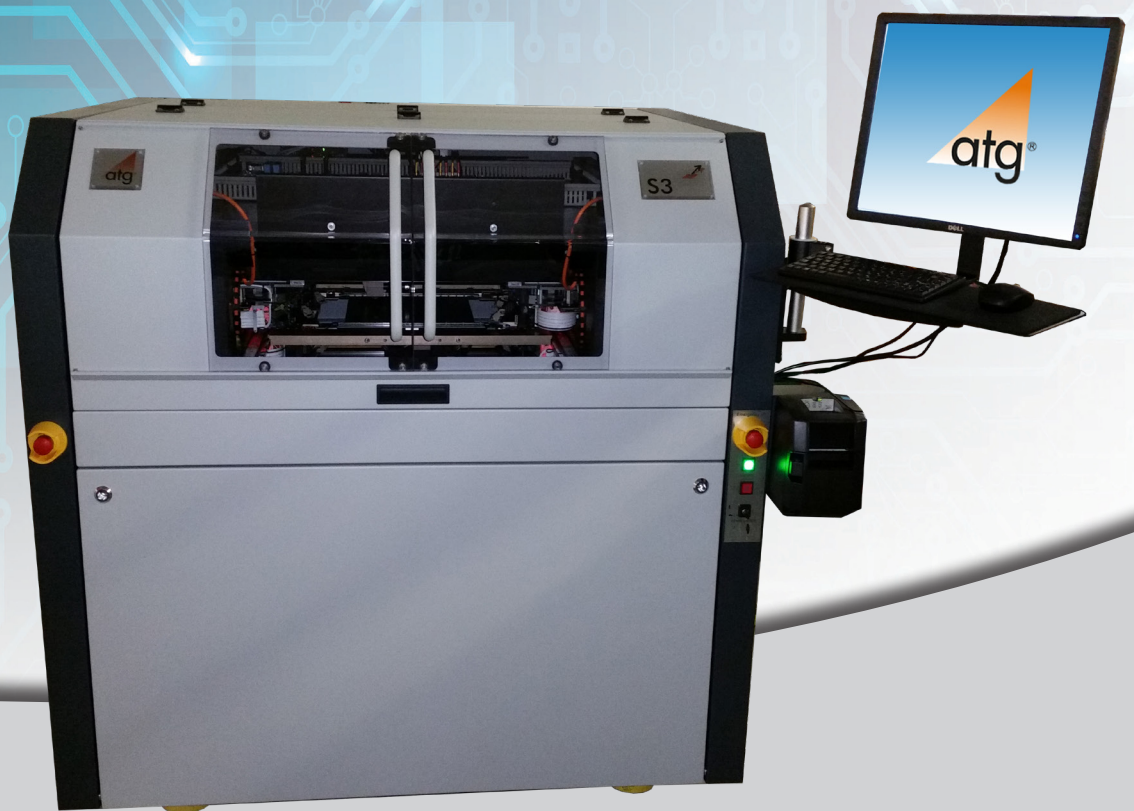


S3-8 Flying Probe Test System

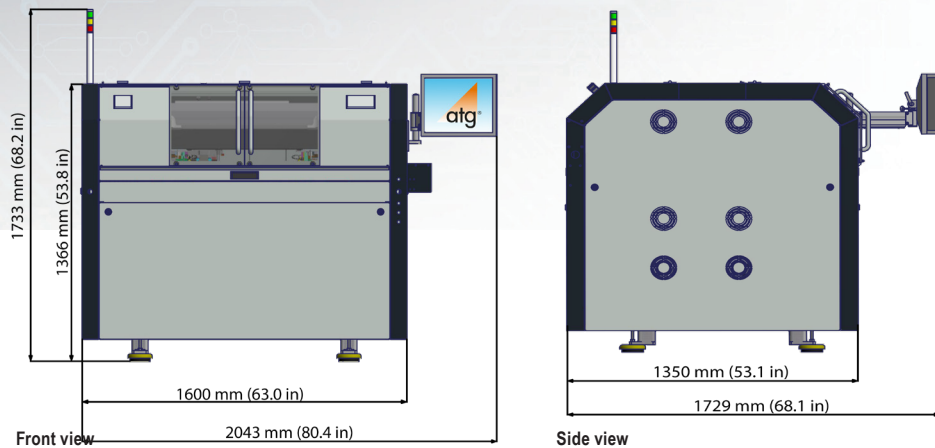
For Substrate Boards



- ▲ 8 Test Heads
- ▲ Double Sided Test System
- ▲ High Speed Direct Linear Drives for X and Z motion
- ▲ Vacuum table optional
- ▲ No Probe Marks
- ▲ Optical auto focus Microscope Lenses
- ▲ Fast 300 mA Kelvin Testing

S3-8 Technical Specifications

Flying Probe Test System



Mechanics

Basic Unit with 8 probes (4 top, 4 bottom)	
Universal shuttle system for Flex and Substrate boards	
Max. board size (X x Y)	350 mm x 310 mm / 13.8" x 12.2"
Test area (X x Y)	350 mm x 310 mm / 13.8" x 12.2"
Board thickness	0.05 mm to 3 mm
Smallest pad	10 μm / 0.4 mil* (Special setup)
Smallest pitch	25 μm / 1.0 mil
Resolution measurement system	$\pm 0.1 \mu\text{m}$ / ± 0.004 mil
Repeatable accuracy	$\pm 1.5 \mu\text{m}$ / ± 0.06 mil
*Micro needle probes	0.3 g to 2.5 g
Soft landing	

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

2 high resolution color cameras for optical scanning of top and bottom side.
Resolution 1.2 μm / pixel

Options

- 4-wire measurement with max. 300 mA test current
0 Ω to 1 k Ω $\pm 2\%$, min $\pm 25 \mu\Omega$
with FP Kelvin probes 0.3 g to 2 g
Smallest pad 30 μm / 1.2 mil*
Smallest pitch 80 μm / 3.2 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 μF	$\pm 2\%$, min. ± 30 fF
L	0 H to 10 mH	$\pm 5\%$, min. $\pm 0.25 \mu\text{H}$


Diode / Varistor

	$U_{\text{F}}, U_{\text{R}}, U_{\text{BR}}$	100 mV to 12.5 V
Structural test of integrated circuits: opens/shorts test on CMOS devices with ESD diodes		



Multi-Point Measurements

Up to three AC/DC sources (voltage and current) simultaneously.

	Transistors (MOSFET and Bipolar), Optocouplers, Fuses, Relays, Transformers, etc. I _{max} = 300 mA
---	---

- Repair software with barcode support
- Vacuum table for single sided test

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), 1000 VA

Power Supply Vacuum Pump for Vacuum Table (optional)

230 V, 50 Hz, 1500 VA

Compressed Air

8 bar / 115 psi, filtered,
constant air quantity

Temperature

18 $^{\circ}\text{C}$ to 24 $^{\circ}\text{C}$

Relative Humidity

40% to 60%

Machine Weight

1350 kg

All information subject to change without notice!
September 2021