

# A6cf Flying Probe Test System

For rigid and flexible PCBs



- ▲ 16 Test Heads
- ▲ Soft touch probe
- ▲ Kelvin 4-Wire Testing
- ▲ Click and Flip Loading for Flex Boards

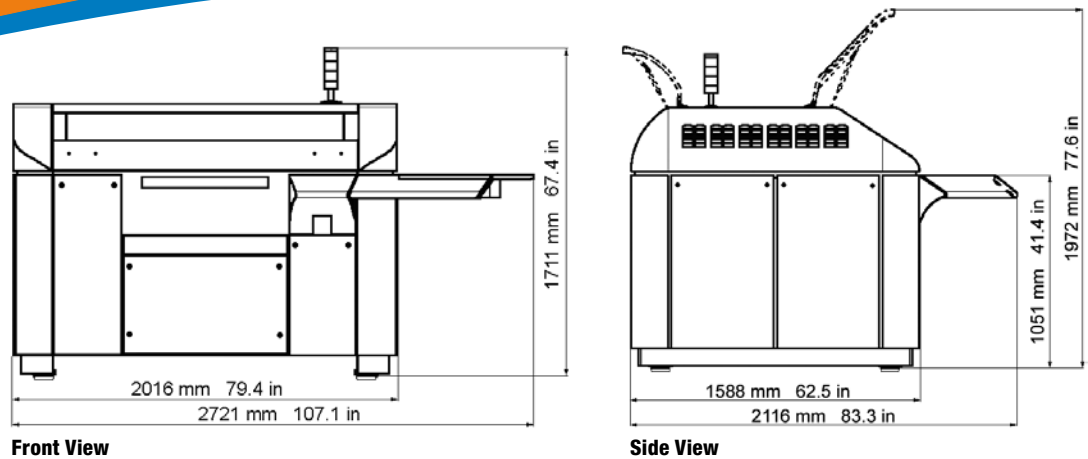
**COMBINEDSTRENGTH**

**atg**  
test systems

**LUTHER & MAELZER**

# Technical Specification

## Flying Probe Test System A6cf



### Mechanics

Basic unit with 16 test probes (8 top, 8 bottom)  
Variable swiveling board fixing system with clamp and tension mode for flexible and rigid boards

Max. board size (X x Y)	630 x 650 mm / 24.8" x 25.6"
Test area (X x Y)	600 x 620 mm / 23.6" x 24.4"
Board thickness	up to 10 mm (0.4")
Smallest pad	35 $\mu$ m / 1.4 mil
Smallest pitch	75 $\mu$ m / 3.0 mil
System accuracy	$\pm 10 \mu$ m / $\pm 0.4$ mil
Repeatable accuracy	$\pm 5 \mu$ m / $\pm 0.2$ mil
Rigid probes	10 to 100 g
or	
Soft touch probes	5 to 15 g / no witness marks

### Electronics

Continuity test	1 $\Omega$ to 10 k $\Omega$
Isolation test	up to 25 M $\Omega$ (FM), up to 2 G $\Omega$ (ohmic) MicroShort Detection <sup>®</sup>
Test voltage	up to 500 V

### Camera System

8 high resolution cameras (1024 x 768 pixel) for rapid optical scanning of top and bottom side  
Accuracy from 5  $\mu$ m / pixel

### Options

- Micro needle probes 0.2 to 2.5 g
- 4-wire measurement:
  - 0.1 m $\Omega$  to 5 m $\Omega$   $\pm 0.1$  m $\Omega$
  - >5 m $\Omega$  to 1 k $\Omega$   $\pm 2\%$
- with Kelvin probes 0.2 to 5 g
- Embedded components test:
  - R 0.5  $\Omega$  to 100  $\Omega$   $\pm 0.5 \Omega$
  - >100  $\Omega$  to 10 M $\Omega$   $\pm 0.5 \%$
  - >10 M $\Omega$  to 50 M $\Omega$   $\pm 2 \%$
  - C 0.03 pF to 1.5 pF  $\pm 0.03$  pF
  - >1.5 pF to 100  $\mu$ F  $\pm 2 \%$
  - L 0.1  $\mu$ H to 3.33  $\mu$ H  $\pm 0.1 \mu$ H
  - >3.33  $\mu$ H to 5 mH  $\pm 3 \%$
- LaTest<sup>®</sup> open detection with LaTest<sup>®</sup> probes: 1 to 10 g
- Measurement current: 0.7 A DC + 0.7 A AC (1 kHz)
- Vacuum box for single-sided test of inner layers and flexible boards, flip test for double sided boards
- Retest of fault files from grid test systems with barcode support
- Repair software with barcode support
- Glass calibration board

<b>Data Input Format</b>	IPC-D-356A
<b>Network Connection</b>	Ethernet, TCP / IP
<b>Power Supply</b>	3 x 400 V, 50 Hz (3 x 208 V, 60 Hz), 2500 VA
<b>Compressed Air</b>	6 bar / 90 psi, filtered
<b>Temperature</b>	18 $^{\circ}$ C to 27 $^{\circ}$ C / 66 $^{\circ}$ F to 81 $^{\circ}$ F, $\pm 2$ K
<b>Relative Humidity</b>	40% to 60%
<b>Machine Weight</b>	1800 kg (3968 lb)

All information subject to change without notice!  
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