



AUTOMATED BENCHTOP 3D MEASUREMENT & ANALYSIS

# ***VisionPro AP Series***

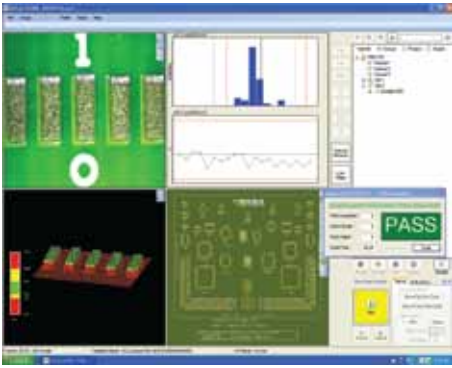
SOLDER PASTE INSPECTION



**VisionPro AP** 3D Solder Paste Inspection Systems, the next generation in ASC International's remarkable line of automated 3D SPI solutions, offer improved positioning accuracy and speed, a dramatic reduction in programming time with the use of PCB Gerber data coupled with a new high-level GUI, and complete data analysis with fully integrated SPC and data logging. Designed to be used by operators on the production floor, each rugged model offers best-in-class performance. The **VisionPro AP** Series includes several price/performance options, satisfying the most demanding technology needs and budget.

**System Features:** Multiple Sensor Options: SP3D and PSI Models • Best-in-class Gauge R&R • Onboard Real-time SPC Charts • Defect Error Review • Customized Data Reports • Both Gerber-based programming and Auto-Scripting for Ease of Use • Fully Automated Measurement of Height, Width, Area and Volume • X-Y Displacement Measurement for Registration and Offset • Wide range of Measurement Applications such as Solder Paste, Adhesives, Thick Films, Grease and More...

## Simple to Use interface



With ASC International's new ASCan Ultra measurement software, creating a fully automated inspection routine can now be completed in less than 10 minutes. In Run mode, the user loads the program, confirms fiducial alignment and the ASCan Ultra software automatically measures the Gerber imported programmed locations with a final "PASS" or "FAIL" message. A defect error review mode allows users to verify "Failed" locations and attach corrective action items for traceability.

## Advanced Statistical Analysis

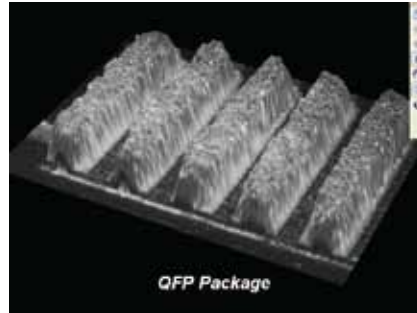
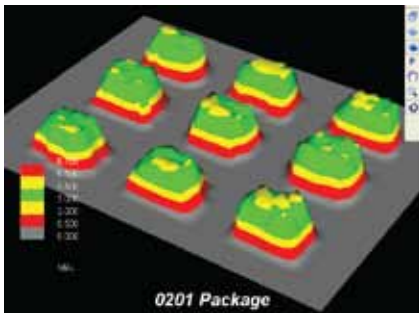
VisionPro AP's ASCan Ultra measurement software includes on-board SPC analytics, a powerful tool to help operators control important parameters of the stencil printing process. Data collected by the system for each desired characteristic is calculated and charted in real-time.

- User-defined LSL, Target and USL
- X-bar / R and histogram charting
- Min / Max/ Median Values
- Cp/Cpk /Cr and Lower Z values

are all part of the advanced statistical analysis software.



## True 3D Color - Photo Realistic Profiling



VisionPro AP's ASCan Ultra measurement software generates true 3D profiles for fast and accurate paste deposition analysis. Technicians can use these profiles to help determine what corrective actions are required to improve the overall print quality, thereby improving yields.

### VisionPro AP Systems include:

- Standard 300mm x 300 mm (12" x 12") Travel
- Windows © System Controller
- 20" LCD Monitor
- Large Anti-static Work Surface
- ASCan Ultra Measurement Software
- Hardware/Software Reference Guides
- One-year Warranty with Free On-line Training

### VisionPro AP System Options:

- NIST Calibration Standard
- Up to 12" x 20" Extended Travel
- Custom PCB Fixtures
- Extended Warranty Options
- Optional Laser or PSI Sensors

## MECHANICAL SPECIFICATIONS

### VisionPro AP Series

#### General System Specifications

Max. Object Thickness:	5.1 cm (2.0")
Standard Work Surface:	51 x 51 cm (20" x 20")
Throat Depth:	38 cm (15")
System Computer:	Windows® based PC
Electrical Requirements:	100 - 240 VAC, 50 - 60 Hz, 2 Amps
Operating Environment:	5° - 38°C (40° - 100°F), <90% Non Condensing
System Weight (CRATED):	36 Kg/80 lbs, (59 Kg/130 lbs)
Measurement Characteristics:	Height, Volume, Area, Width, Length, Displacement, 3D Defect Analysis
SPC Charting/ Data Reports:	Integrated

#### VisionPro AP Sensor Specifications

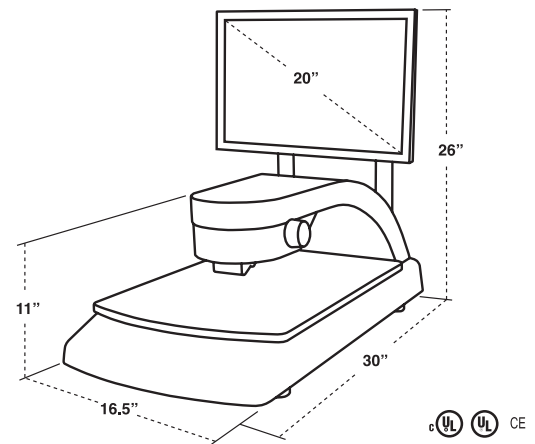
	APSP3D	AP300	AP500
Measurement Principle:	Laser Triangulation	Phase Shift Interferometry (PSI)	
Camera Size:	1280 x 1024	640 x 480	1280 x 1024
Lateral Resolution:	3.5µm (0.00014")	4.3µm (0.00017")	1.78µm (0.00007")
FOV Size:	4.8 x 3.6mm (0.186" x 0.142")	2.8 x 2.1mm (0.110" x 0.083")	8.7 x 6.2mm (0.343" x 0.242")
Z Resolution:	2.54µm (0.0001")		1.78µm (0.00007")
Measurement Range:	2.5 mm (0.1")		365µm (0.0144")
Illumination:	Laser & White LED		White LED

#### Inspection Performance

	APSP3D	AP300	AP500
Inspection Speed:	60 Frames/sec.	1 second 3D FOV	1 second 3D FOV
Static Repeatability:	2.5µm (0.0001")	1µm (0.00004")	1µm (0.00004")
Gauge R&R (±50% tolerance)	<10%	<10%	<10%
Height Accuracy on Cal Target	2µm (0.00008")	1µm (0.00004")	1µm (0.00004")
Min. Paste Deposity	127µm (0.005")	51µm (0.002")	51µm (0.002")

#### Optional Large FOV - SP3D XL

	APSP3D
FOV:	25 x 17.9mm (1.0" x 0.7")
Resolution:	4µm (0.00017")



## VisionPro - Light Years Ahead

### For More Information:

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