APOGEE 90

Microfocus X-ray Inspection

DATASHEET

At Line Inspection of PCBs, Components, and Assemblies.

FEATURES & BENEFITS

Optimal Performance and Operability at a Fraction of the Cost of Comparable X-ray Inspection Systems

VJ ELECTRONIX

APOGEE

Key Features:

- + 90kV Sealed X-ray Tube, 4µm Focal Spot
- + Oblique Angle Inspection up to 45°
- + 5" HD Digital Flat Panel Detector
- + 6-Axis Motion Control
- + Programable Inspection Sequences
- + On-screen Point & Click Navigation
- + 41X Geometric/180X Digital Magnification
- + 2D & 2.5D X-ray Imaging
- + Built-in Tools for Image Manipulation
- + Real-time Image Visualization & Capture
- + Automated Defect Enhancement Option

The APOGEE 90 was built to fullfill the need for an affordable and reliable inspection system with advanced features for defect detection, failure analysis, and NDT in production environments. The system is capable of capturing the highest clarity 2D & 2.5D x-ray images that provide operators with confidence in their findings.

Equipped with powerful and versatile Vi3 Software, the APOGEE 90 creates efficiency in almost any inspection task - from quick spot checking of random samples and automated inspection routines, to enhanced analysis of BGAs and QFNs and more. Operators can easily navigate the intuitive GUI and perform tasks with minimal training.

Creatively designed with the superior resolution and automation typically found in higher cost systems, the APOGEE 90 is one of the most powerful and economical, maintenance-free x-ray inspection systems available today.









APOGEE 90 - TECHNICAL SPECIFICATIONS

	X-ray Source	Sealed, Microfocus					
		8W	90kV 0.160mA				
	Power/Voltage/Current		90KV 0.100111A				
	Min. Spot Size	4µm					
	Detector	5" FPD Grey Scale: 16-bit (65,536 shades) 2.36 MP					
	Pixel Pitch	85µm					
	Field of View	2.875″x2.875″ (73mm x 73mm)					
	Imaging Speed	10 FPS/Location					
	X-ray Cabinet/Safety	<0.1 mR/hr (1.0 uSV/hr) IEC, CE, & FDA			FDA		
	Stage/Sample Size	18.1" x 18.1" (460 x 460mm)					
	Max. Inspection Area	17″x17″ (430mm x 430mm)					
	Axis of Manipulation	6-Axis (Sample X, Y Source Z Detector X, Z, 45°Tilt)					
	Motion Control	X/Y - Joystick	X/Y - Joystick On-scr			creen Navigation	
	Magnification	Geometric Ma	Geometric Max: 41X Digital Max: 180X			Х	
	Software	VJE's Proprietary Vi3					
	Programming & Automation	Manual Progr	amming	CAD/G	CAD/Gerber Data Import		
	Image & Data Processing	 Contrast C 	udo Color + Void Analysis (BGA, QFN			nents , wire iameter) 8GA, QFN,	
	Data Output	Image: TIF, BMP, JPG (Raw Image and/or annotated)					
	-	Analysis Data: .XLS					
	System	OS: Windows		Display: 24" High-Res LCD			
	Sample Change	Large Sliding Front Door					
	System Footprint	47 x 55.5 x 71 inches (1200 x 1400 x 1800 mm)					
	System Weight	1452Kg (3200lbs)					
	Power Requirement	100 – 240 VAC (50/60 Hz), 4.2A @ 120V and 2.3A @ 220V					
	Warranty	1 Year					

PERFORMANCE