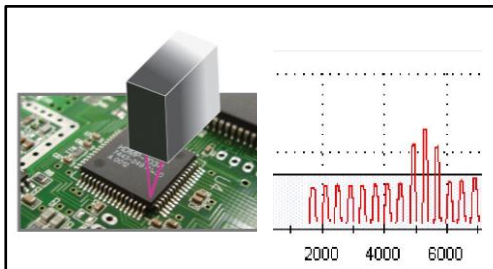


## MV-6e 2D/3D AOI Series

- ▶ Exclusive 10MP/18MP Camera System
- ▶ Precision Compound Telecentric Camera Lens
- ▶ Eight Phase Color Lighting System
- ▶ 10MP/18MP SIDE-VIEWER® Camera System
- ▶ Precision Compound Telecentric Camera Lens
- ▶ Eight Phase Color Lighting System
- ▶ Integrated INTELLI-SCAN® Laser Inspection System
- ▶ 3D Co-Planarity Inspection of Gull-Wing Leads, BGA and CSP Devices
- ▶ Enhanced 3D Solder Paste Height Measurement Capability
- ▶ INTELLISYS® Industry 4.0 Intelligent Factory Automation System

### INTELLI-SCAN®

Laser 3D Inspection System



# MV-6e 2D/3D AOI Series Specifications

## Standard Features:

- ▶ Intel® Multi-Core PC, 32" Flat Screen LCD Monitor, Windows 10™ OS, HDD, Mouse & Keyboard, Network LAN Card.
- ▶ Single Stage High-Speed Conveyor System with Programmable Width Control and Automatic PCB Support.
- ▶ Advanced Eight (8) Phase Color LED Lighting System
- ▶ Pre and Post Reflow Inspection Capability.
- ▶ Automatic Teach Tool (ATT) Software - Automatic Programming Using Centroid Data.
- ▶ Comprehensive Package Type Library - Provides Simple "Drag and Drop" Component Programming.
- ▶ Local System Software: Repair Plus Software, Statistical Process Control (SPC) Software.

## Options:

- ▶ 10 Mega Pixel or 18 Mega Pixel Top-Down Color Camera System (See Specifications).
- ▶ SIDE-VIEWER® Camera System - Quantity (4) 10MP or 18MP CXP Side-Angle Digital Color Cameras. (See Specifications).
- ▶ INTELLI-SCAN® Laser 3D Inspection System for Co-Planarity Inspection of Gull-Wing Leads, BGA and CSP Devices.
- ▶ ePM-AOI CAD Import Software. ODB++ Import Module Sold Separately (Requires ePM AOI).
- ▶ 2D Bar Code Reader Options: Gun Type, Camera Type and External Mount.
- ▶ MV-6DL Shuttle Conveyor Options: Input Shuttle Conveyor, Output Shuttle Conveyor.
- ▶ Remote PC - Software Purchased Separately.
- ▶ Remote Software: Repair System Software, Statistical Process Control (SPC) Software, Off-Line Teaching Software (OLTT).
- ▶ Total Remote Management Software (TRMS) - Requires Server Software for Remote PC and Client Software on All Machines.
- ▶ INTELLI-TRACK® Process Control Software - Requires Server Software for Remote PC and Client Software on All Machines.
- ▶ SVN Multi-System Version Control Software - Requires Separate PC Server.

## System Specifications:

(Subject to change without prior notice)

PCB Inspection Area	
MV-6e	50 mm x 50 mm to 510 mm x 460 mm (2.0" x 2.0" to 20.1" x 18.1")
MV-6e (Extended PCB Size)	50 mm x 50 mm to 510 mm x 510 mm (2.0" x 2.0" to 20.1" x 20.1")
MV-6DL (Dual Lane)	Single Lane: 50 mm x 50 mm to 460 mm x 590 mm (2.0" x 2.0" to 20.1" x 23.23") / Dual Lane: 50 mm x 50 mm to 460 mm x 300 mm (2.0" x 2.0" to 20.1" x 11.81")
MV-6em (Small-Footprint)	50 mm x 50 mm to 330 mm x 280 mm (2.0" x 2.0" to 12.99" x 11.02")

Vision System (FOV Size)			
10MP CameraLink: (3,664 x 2,736 @ 15 fps)	Option 1	Pixel Resolution: 13.4 um	49.09 mm x 36.66 mm (1.93" x 1.44")
	Option 2	Pixel Resolution: 9.8 um	35.90 mm x 26.81 mm (1.38" x 1.06")
18MP CoaXPress: (4,912 x 3,684 @ 24 fps)	Option 1	Pixel Resolution: 9.8 um	48.13 mm x 36.10 mm (1.89" x 1.42")
	Option 1	Pixel Resolution: 7.3 um	36.03 mm x 27.02 mm (1.42" x 1.06")

Inspection Technology	
2D Inspection Technology	10MP CameraLink / 18MP CoaXPress Top-Down Camera System
3D Inspection Technology	INTELLI-SCAN® Laser 3D Inspection System: (1.5 um/Point)
Maximum 3D Inspection Height	10 mm @ ±10 um
2D Inspection Item	Missing Component, Wrong Component, Mis-Alignment, Skewed Component, Polarity, Tombstone, Solder Joint, Solder Bridge, Flipped Device, Solder Ball, Etc
3D Inspection Item	3D Laser Scan Inspection for Co-Planarity of Gull-Wing Leaded Devices, Four (4) Point 3D Laser Height Inspection for Co-Planarity of BGA and CSP Devices

Additional Specifications	
Lens Configuration	Precision Telecentric Compound Lens Design
Lighting System	Eight (8) Phase Color LED / Three (3) Phase White LED
SIDE-VIEWER® Camera System	Quantity Four - 10MP Color Side-Angle Cameras
	Quantity Four - 18MP CoaXPress Color Side-Angle Cameras
PCB Surface Clearance	Top-Side Clearance: 45 mm / Bottom-Side Clearance: 50 mm
PCB Edge Clearance	Top-Edge Clearance: 3 mm / Bottom-Edge Clearance: 3.5 mm
Maximum PCB Warpage	±2 mm
Maximum PCB Weight	Standard: 4 Kg (8.82 Lbs.)
PCB Thickness Range	Standard: 0.5 mm - 3 mm / Optional: 0.5 mm - 5 mm
Minimum Component Inspection	0402 Chip (mm) / 01005 Chip (in) / 0.3 Pitch (mm)
Robot Positioning System	Precision Closed Loop AC Servo Drive, Resolution: 1 um / Repeatability: ±10 um
Power Requirements	Single Phase 200~240V 50~60Hz; 1.1 KW, Breaker Capacity: 25 Amp
Air Requirements	5 Kgf / cm² (0.5 Mpa); (71 PSI)

Machine Dimensions and Weight		
MV-6e	1,080 mm W x 1,470 mm D x 1,500 mm H (42.5" x 57.87" x 59.1")	950 Kg (2,094 lbs.)
MV-6DL	1,080 mm L x 1,610 mm W x 1,610 mm H (42.5" x 63.39" x 63.39")	1,030 Kg (2,270.76 lbs)
MV-6em	900 mm L x 1,290 mm W x 1,660 mm H ( 35.43" x 50.79" x 65.35")	870 Kg (1,918.02 lbs)