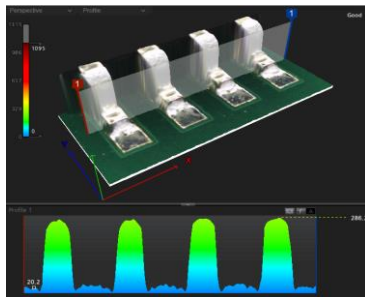
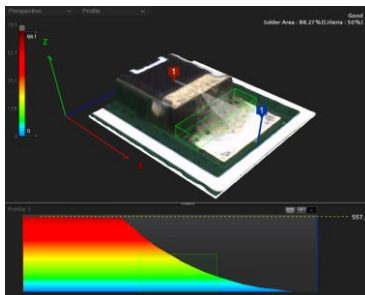


## MV-3 OMNI Desktop 3D AOI Series

- ▶ Exclusive 15MP/25MP CoaXPress Camera System
- ▶ OMNI-VISION® 3D Digital Tri-Frequency Moiré Technology
- ▶ Leading-Edge 12 Projection Blue DLP Technology
- ▶ Precision Compound Telecentric Camera Lens
- ▶ Eight Phase Color Lighting System
- ▶ 10MP/18MP SIDE-VIEWER® Camera System
- ▶ Programmable Z-Axis Multi-Focus System
- ▶ INTELLI-PRO® Automatic Programming Software
- ▶ Multi-Functional AOI-SPI Fusion Technology
- ▶ INTELLISYS® Industry 4.0 Intelligent Factory Automation System



3D Gull-Wing Co-Planarity Inspection



3D Solder Fillet Inspection



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# MV-3 OMNI Desktop 3D AOI Series Specifications

## Standard Features:

- ▶ Intel® Multi-Core PC, 32" Flat Screen LCD Monitor, Windows 10™ OS, HDD, Mouse & Keyboard, Network LAN Card.
- ▶ OMNI-VISION® - Digital Tri-Frequency Moiré Technology - 12 Projection Blue DLP - 25mm 3D Inspection Capability.
- ▶ Semi-Automatic PCB Support System.
- ▶ 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:

- ▶ 15 Mega Pixel or 25 Mega Pixel CoaXPress Top-Down Color Camera System (See Specifications).
- ▶ SIDE-VIEWER® Camera System - Quantity (4) 10MP or 18MP CXP Side-Angle Digital Color Cameras. (See Specifications).
- ▶ Programmable Z-Axis Multi-Focus System - Provides Optimal Focus Level for Taller Devices.
- ▶ ePM-AOI CAD Import Software. ODB++ Import Module Sold Separately (Requires ePM AOI).
- ▶ AOI-SPI Fusion Technology - Provides Both AOI and SPI Capability in a Single Platform.
- ▶ 2D Bar Code Reader Options: Gun Type and Camera Type.
- ▶ 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-3 OMNI           | 50 mm x 50 mm to 450 mm x 400 mm (2.0" x 2.0" to 17.2" x 15.75") |

| Vision System (FOV Size)                  |          |                          |                                     |
|-------------------------------------------|----------|--------------------------|-------------------------------------|
| 15MP CoaXPress: (3,904 x 3,904 @ 120 fps) | Option 1 | Pixel Resolution: 15 um  | 58.56 mm x 58.56 mm (2.31" x 2.31") |
|                                           | Option 2 | Pixel Resolution: 10 um  | 39.04 mm x 39.04 mm (1.54" x 1.54") |
| 25MP CoaXPress: (5,120 x 5,120 @ 72 fps)  | Option 1 | Pixel Resolution: 7.7 um | 39.42 mm x 39.42 mm (1.55" x 1.55") |

| OMNI-VISION® Inspection Technology |                                                                                                                                                |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 3D Inspection Technology           | Digital Tri-Frequency Moiré Technology - 12 Projection Blue DLP                                                                                |
| 2D Inspection Technology           | 15MP / 25MP CoaXPress Camera System                                                                                                            |
| Maximum 3D Inspection Height       | 25 mm @ ±3 um                                                                                                                                  |
| 2D Inspection Item                 | Missing Component, Wrong Component, Mis-Alignment, Skewed Component, Polarity, Tombstone, Solder Bridge, Flipped Device, Solder Ball, Etc      |
| 3D Inspection Item                 | Component Height, Position, Lifted Package, Lifted Lead, Solder Fillet, Excessive Solder, Insufficient Solder, Solder Bridge, Open Solder, Etc |

| Additional Specifications    |                                                                                |
|------------------------------|--------------------------------------------------------------------------------|
| Lens Configuration           | Precision Telecentric Compound Lens Design                                     |
| Lighting System              | Eight Phase Color Lighting                                                     |
| 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: 3 Kg (6.61 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                |

| Machine Dimensions and Weight |                                                          |                   |
|-------------------------------|----------------------------------------------------------|-------------------|
| MV-3 OMNI                     | 975 mm L x 1,300 mm W x 790 mm H (38.4" x 51.2" x 31.1") | 200 Kg (440 lbs.) |