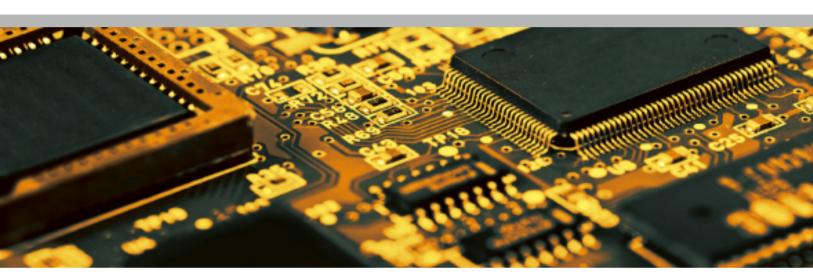


# **3D AOI** Series

# MV-6 omni







- 25/15 Megapixel Top Camera
- 12 Projection Moiré Technology
- 8 Phase Coaxial Color Light
- 18 Megapixel Angled Camera

## **3D AOI** Series

# MV-6 omni

#### MV-6 OMNI Series is

a Full-3D inline vision inspector with 25 Megapixel high resolution camera, Digital moiré 12 projections, 18 Megapixel side cameras and 8 Phase coaxial color lighting system to allow inspection up to 03015 (mm) chip.





## Digital 12 Projection Moiré Technology

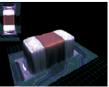
Moiré Projection Unit measures a component in EWSN 4 directions to obtain 3D image for failsafe and highspeed defect detection.

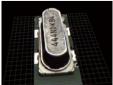


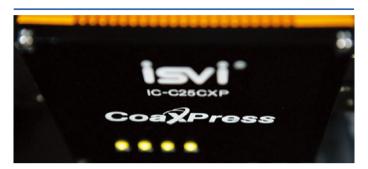
- Obtain 3D image without blind spots using 4(four) 3D projections
- Various component height inspection with the combination of high, medium and low frequency moiré pattern
- Linkage with the main camera to apply Full 3D inspection to detect various defects flawlessly

Frequency	1. Projector	2. Projector	3. Projector	4. Projector
High				
Medium				
Low				









#### **High Resolution 25 Megapixel Camera**

We are proud to have applied the next generation vision system with the 25 Megapixel high resolution camera for more precise and stable inspection and high speed CoaXPress transmission method to allow 4 times more data transmission and 40% increased process speed.

- 25 Megapixel Camera Loaded
- CoaXPress high performance vision system applied
- Large FOV to increase inspection speed
- Processing speed increased by 40% compared to Camera Link



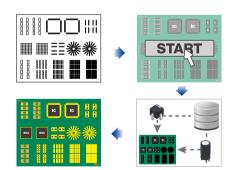




#### Deep Learning applied Auto Teaching Tool

Inspection software which is applied Deep Learning solution search the most suitable component information and teach the component automatically. User would have the best inspection quality always regardless of user's skill as all of process will be done by a few clicks.

- Reduce teaching time more over 90% than manual teaching
- Secure the best inspection quality through working process standardization
- Accurate component searching and matching by applying Deep Learning solution



#### 18 Megapixel Angled Camera

- 4 cameras in EWSN applied
- The only solution for J-lead, QFN and Coil Solder inspection
- · Full-PCB inspection with side cameras



#### 8 Phase Coaxial Color Light

- · Color change extraction following angle of reflection
- · Ideal for Chip / IC lift, micro crack and solder inspection
- · Precise solder joint inspection

Lighting	PCB Noise	Color Light Noise and Uniformity	Fiducial Mark Reading Precision
6 Phase Color Light		Des est	+
8 Dhaca		Improved image	
Coaxial Color Light			+
	6 Phase Color Light 8 Phase Coaxial Color	8 Phase Coaxial	8 Phase Coaxial

#### Intellisvs® Svstem

Possible to recognize in advance when a defect occurs in the line and support to reduce cost due to defects by remote controlling.

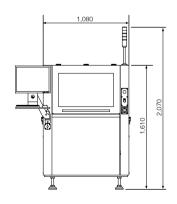


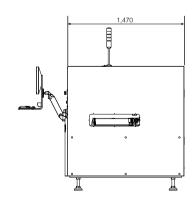
## **Specifications**

Model			MV-6 OMNI		
PCB Size Range					
Single Stage Conveyor	Single Lane		50 x 50 ~ 510 mm		
	Dual Lane		50 x 50 ~ 510 x 590 mm(Single) / 50 x 50 ~ 510 x 300 mm(Dual)		
Triple Stage Conveyor	Single Lane		50 x 50 ~ 330 x 510 mm / 50 x 50 ~ 510 x 510 mm		
(Option) Dual Lane			50 x 50 ~ 330 x 280 mm(Dual)		
Flipper (Option, Triple CV)			50 x 50 ~ 460 x 400 mm		
OMNI-VISION® 3D / 2D	Inspection Techno	logy			
3D Inspection Technology			Digital 12 Projection Moiré Technology		
Height Accuracy			±3 µm		
3D / 2D Maximum Insp	ection Speed				
25 Megapixel Camera	CoaXPress	7.7 µm	1,460 mm² / Sec		
-	6 1/5	10 μm	1,890 mm <sup>2</sup> / Sec		
15 Megapixel Camera	CoaXPress	15 μm	4,260 mm² / Sec		
2D Maximum Inspectio	n Speed				
25 Megapixel Camera	CoaXPress	7.7 µm	4,593 mm² / Sec		
		10 μm	5,080 mm² / Sec		
15 Megapixel Camera	CoaXPress	15 µm	10,716 mm <sup>2</sup> / Sec		
System Specification					
Lighting System			8 Phase Coaxial Color Lighting System		
Side Camera System		Option	18/10 Megapixel Digital Color Side Camera (4ea)		
Software		Standard	Built-in SPC, Built-in Repair		
		Option	RMS, RRS, IRS, OLTT, RDS, Remote SPC, ePM-AOI		
PCB Top Side Clearance			45 mm		
PCB Bottom Side Clearance			50 mm		
DOD This I		Standard	0.5 mm ~ 5 mm		
PCB Thickness		Flipper	1.5 mm ~ 2.6 mm		
		Standard	4 kg		
Maximum PCB Weight		Flipper	3 kg		
	25M CXP Camera	7.7 µm	03015 Chip (mm) / 0.3 Pitch (mm)		
Minimum Measurement Size	15M CXP Camera	10 μm	03015 Chip (mm) / 0.3 Pitch (mm)		
SIZE		15 µm	0603 Chip (mm) / 0201 Chip (inch) / 0.4 Pitch (mm)		
Robot Positioning System		X/Y Axis	Servo Motor System		
Power Requirements			Single Phase(s) 200-240V 50-60Hz, 1.1 kW		
Air Requirements			5 Kgf / cm² (D.5 MPa), 5 LPM		
Dimension and Weight					
	Machine		1,080(W) x 1,470(D) x 1,610(H) mm		
Dimension	Width (Machine & Conveyor)	Single Stage Conveyor	1,110 mm		
DIFFICISION		Triple Stage Conveyor	1,110 mm(DL) / 1,270 mm(SL, S size PCB) / 1,630 mm(SL, M size PCB)		
		Flipper (Triple CV)	1,550 mm		
	Single Lane		Approx. 950 kg		
Weight	Dual Lane		Approx. 1,000 kg		
	Flipper (Triple CV)		Approx. 1,000 kg		

<sup>#</sup> We will not be responsible for any problems caused by using unverified BARCODE READER. Contact our HQ for the list of allowed BARCODE READER models to use.

**Dimension** (Unit:mm)





 $\boldsymbol{\cdot}$  Data subject to change without notice.



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