

MV-PSA-xxx-CxDx-WDM

Area Scan Dome Light Vision Inspection System



Introduction

MV-PSA-xxx-CxDx-WDM area scan vision inspection system consists of camera, frame grabber, light source, light controller, and cables. With the dome light and photometric stereo technique, the product can accurately detect surface defects on diffuse-reflective and rough objects, regardless of interference of similar colors, matte textures, and a complex background. The dome light supports area scanning mode and line scanning mode switch by replacing area scan camera with line scan camera. With a default area scan camera, the product is applicable to static scenes.

Available Model

- MV-PSA-05GM-C4D30-WDM
- MV-PSA-12GM-C4D30-WDM
- MV-PSA-25GM-C4D30-WDM
- MV-PSA-05UM-C4D30-WDM
- MV-PSA-12UM-C4D30-WDM
- MV-PSA-25UM-C4D30-WDM
- MV-PSA-12GM-C4D50-WDM
- MV-PSA-25GM-C4D50-WDM
- MV-PSA-05UM-C4D50-WDM
- MV-PSA-12UM-C4D50-WDM
- MV-PSA-25UM-C4D50-WDM

Key Features

- Adopts photometric stereo technique to accurately detects surface defects.
- Effectively eliminates interference of similar colors, matte textures, and a complex background, suitable for defect detection on diffuse-reflective and rough objects.
- Supports area scanning mode and line scanning mode switch, which is applicable to static/dynamic scanning scenes.
- Combined with VisionMaster software to simultaneously achieve 2.5D imaging and defect recognition.

Applicable Industry

New energy, automotive manufacturing, consumer electronics, metal processing, etc.

Specification

Model	MV-PSA-05GM-C4D30-WDM	MV-PSA-12GM-C4D30-WDM	MV-PSA-25GM-C4D30-WDM
Camera			
Pixel size	3.45 μm × 3.45 μm		2.5 μm × 2.5 μm
Resolution	2448 × 2048	4096 × 3000	5120 × 5120
Max. frame rate	74.1 fps @ 2448 × 2048 Mono 8	9.5 fps @ 4096 × 3000 Mono 8	4.5 fps @ 5120 × 5120 Mono 8
Mono/color	Mono		
Pixel format	Mono 8/10/10Packed/12/12Packed		
Transmission interface	Gigabit Ethernet (1000 Mbit/s), compatible with Fast Ethernet (100 Mbit/s)		
Light Source			
Dimension	350 mm × 350 mm × 308.3 mm (13.8" × 13.8" × 12.1")		
Emitting area dimension	180 mm × 180 mm (7.1" × 7.1")		
Color	White		
Communication mode	Network interface		

Model	MV-PSA-05UM-C4D30-WDM	MV-PSA-12UM-C4D30-WDM	MV-PSA-25UM-C4D30-WDM
Camera			
Pixel size	3.45 μm × 3.45 μm		2.5 μm × 2.5 μm
Resolution	2448 × 2048	4096 × 3000	5120 × 5120
Max. frame rate	74.1 fps @ 2448 × 2048 Mono 8	30.7 fps @ 4096 × 3000 Mono 8	14 fps @ 5120 × 5120 Mono 8
Mono/color	Mono		
Pixel format	Mono 8/10/10Packed/12/12Packed		
Transmission interface	USB 3.0, compatible with USB 2.0		
Light Source			
Dimension	350 mm × 350 mm × 308.3 mm (13.8" × 13.8" × 12.1")		
Emitting area dimension	180 mm × 180 mm (7.1" × 7.1")		
Color	White		
Communication mode	Network interface		

Specification

Model	MV-PSA-12GM-C4D50-WDM	MV-PSA-25GM-C4D50-WDM
Camera		
Pixel size	3.45 μm × 3.45 μm	2.5 μm × 2.5 μm
Resolution	4096 × 3000	5120 × 5120
Max. frame rate	9.5 fps @ 4096 × 3000 Mono 8	4.5 fps @ 5120 × 5120 Mono 8
Mono/color	Mono	
Pixel format	Mono 8/10/10Packed/12/12Packed	
Transmission interface	Gigabit Ethernet (1000 Mbit/s), compatible with Fast Ethernet (100 Mbit/s)	
Light Source		
Dimension	550 mm × 550 mm × 395 mm (19.7" × 19.7" × 15.6")	
Emitting area dimension	400 mm × 400 mm (15.7" × 15.7")	
Color	White	
Communication mode	Network interface	

Model	MV-PSA-05UM-C4D50-WDM	MV-PSA-12UM-C4D50-WDM	MV-PSA-25UM-C4D50-WDM
Camera			
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