

AOI-631 Optical Inspection Check System Specification V1.0



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Field of view		Narrow
Installation distance		Installation distance 40 40 (unit: mm) 40 to 150mm Installed distance 40 mm: 8 (H) × 6 (V) mm to Installed distance 150 mm: 32 (H) × 24 (V) mm*1
Number of p	ixels	360,960 pixels
	Inspection items	Shape search, sensitive search, area, edge position, edge pitch, edge width, and labeling.
Main	Number of simultaneous measurements	32
functions	Position compensation	Supported (360º Model position compensation, Edge position compensation).
	Number of registered scenes	32
	Calibration	Supported
	Image processing method	Monochrome
Image input	Image filter	HDR, High Gain, Colour Filters, Digital Zoom (x2, x4), Brightness Correction, Tilt correction, White balance, Mask outline, Mask area, Test run, Tool Autotune, Input monitor, Output test
	Image elements	1/3 inch monochrome CMOS
	Shutter	1/20 to 1/50,000
	Processing resolution	752 × 480
	Partial input function	Supported horizontally and vertically



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	Image display	Zoom-in/Zoom-out/Fit, Rotating by 180°
	Lens mounts	_
Lighting	Lighting method	Pulse lighting/DC lighting is switchable
	Lighting color	white LED
Data logging	Measurement data	In Sensor: 1,000 items (If an IV-Navigator is used, results can be saved up to the capacity of an SD card).
	Images	In Sensor: 300 images (If an IV-Navigator is used, images can be saved up to the capacity of an SD card).
Auxiliary function		Security settings, Simulator, Prevention function for mutual interference among heads, Total status output, Direct connection (2 units or more), List of NG Sensor Occurrences, NG Hold Function
Measurement trigger		External trigger (single or continuous). Communications trigger (FTP client, Ethernet/IP(TM), PROFINET).
	Input signals	6 inputs (IN1 to IN6) IN1: Set external trigger.
		8 outputs (OUT1 to OUT8)
I/O specifications	Output signals	Output assignable function • Total Status NG • BUSY
	Ethernet specifications	100BASE-TX/10BASE-T
	Communications	FTP client, Ethernet/IP(TM), PROFINET
Ratings	Power supply voltage	24 VDC ± 10% (including ripple)
	Current consumption	1.5 A or less when also using an expansion unit. (The output load is excluded.)
Environ- mental immunity	Ambient temperature range	Operating: 0 to 50°C Storage: -25 to 65°C (with no icing or condensation)
	Ambient humidity range	Operating and storage: 35% to 85% RH (with no condensation).
	Ambient atmosphere	No corrosive gas
	Vibration resistance (destruction)	10 to 55 Hz, 1.5 mm double amplitude, 2 hours each for X, Y, and Z axes
	Shock resistance (destruction)	500 m/s2 6 different directions in 3 times



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	Degree of protection	IEC 60529 IP67 (Except when Polarizing Filter Attachment is mounted or connector cap is removed.)
Materials		Body: zinc diecast, front cover: acrylic (hard coating), indicator cover: TPU
Weight		Approx.75g
LED class		Risk Group 1 (IEC62471)



Revision History

Date	Version	Changes
2021/06/21	V1.0	Initial release.

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