BOA™ Spot ID Vision Sensors

Features and Benefits

- Robust decoding of most 1D and 2D symbologies
- Exceptionally high read rates
- Tolerates variation in print method and background
- Provides print quality grading
- Offers OCR and error proofing tools
- Easy-to-use GUI. Good for 1st-time users
- Built-in Ethernet/IP and Profinet communications
- FTP image transfers
- Remote monitoring via web browser
- Integrated light, lens and processing
- Standard and high resolution sensor options
- M12 (standard) or C-mount lens options
- Compact IP67 enclosure
- Low cost of ownership

Overview

BOA Spot ID vision sensors deliver fast and reliable code reading performance for part identification and tracking applications

Robust, high-speed decoding of 1D barcodes and 2D matrix codes can be combined with character reading, pattern matching and error proofing tools to identify, track and verify more for less. The low-cost BOA Spot ID vision sensor offers exceptionally high read rates and provides the option to verify additional product markings or features. The all-in-one product comes with integrated optics, light and easy-to-use application software. No vision experience? No problem!

As a code reader, the BOA Spot ID offers versatile decoding of multiple symbologies and can tolerate normal variation in printing methods, marking types and background surfaces. Image filters and control parameters are provided to enhance readability of poorly printed codes and codes printed on plastic or metallic surfaces using laser/chemical etch, ink jet or dot peen marking methods. Grading algorithms are included for verifying the quality of decoded symbols against ISO and AIM industry standards.

Inspections using BOA Spot ID vision sensors can be triggered by parts in motion or from a PLC after being moved into position. Standard factory protocols, such as Ethernet/IP and PROFINET, are directly supported for communicating with 3rd party equipment or the factory enterprise. Furthermore, inspected images can be transferred to a networked drive using the FTP protocol.

The BOA Spot enclosure is compact and easy to integrate mechanically. M12 connectors are accessible on the back of the unit for Ethernet and I/O interfacing. Standard M12 cabling is supported to further reduce integration cost.

GUI

The software user interface is quick to learn and applicable for both novice and expert users alike. Guided setup is supported on the top navigation bar, while the left and bottom panels are used for function-specific setup, advanced control and status reporting. The interface offers a full complement of features for both setup and runtime operation.
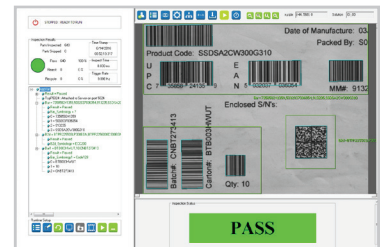
MODELS

BOA Spot ID is available in two models, each with 640x480 or 1280x960 sensor resolution. The standard IDS model includes the core 1D/2D decoders and basic error proofing tools, while the expanded IDE model adds advanced Direct Part Marking (DPM) decoding, OCR (character recognition) and pattern matching tools.

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Feature		BOA Spot ID Models			
		0640M-IDS	**1280M-IDS**	**0640M-IDE**	**1280M-IDE**
Setup Interface (GUI)		Inspect			
Job Storage		32			
Sensor	Type	1/3" Mono Global Shutter, 3.75µm pixel			
	Format	640x480	1280x960	640x480	1280x960
	Rate	45 fps	30 fps	45 fps	30 fps
Lens	M12 Standard	8 mm			
	M12 Option	6, 12, 16 mm			
	C-Mount Option	6mm - 50 mm			
Light	Standard	6 LED White Ring Light			
	Options	External light with strobe control			
Communications	Connections	M12 Ethernet			
		M12 Power, I/O, RS-232			
	Inputs	3 (1 Trigger, 2 general purpose/job select)			
		ON > 10VDC (xmA); OFF < 2VDC (xmA)			
	Outputs	3 (general purpose)			
		100 mA max load at 24V			
	Protocols	Ethernet, Ethernet/IP, PROFINET			
		FTP, RS-232			
Vision	Location	Point		Pattern	
		Blob		Blob, Point	
				Edge	
	Identification	1D		1D	
		2D		2D (incl. DPM)	
		Character Count		OCR	
				Character Count	
	Grading	ISO 15415, 16022		ISO 15415, 16022	
		AIM DPM		AIM DPM	
	Inspection	Edge location		Pattern match/verify	
		Feature Count		Feature Count	
				Edge Count/Measure	
Mechanical	Dimensions	61 mm x 58 mm x 57 mm			
	Mounting	8 x M4			
	Weight	0.20 kg			
	Protection	IP67			
	Certification	CE, RoHS			
Operating	Power	12-30 VDC			
		250 mA maximum @ 24V; 300mA @ 24V including light			
	Temperature	0-50 °C Operating			

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