

NEW BOA3 SMART CAMERA

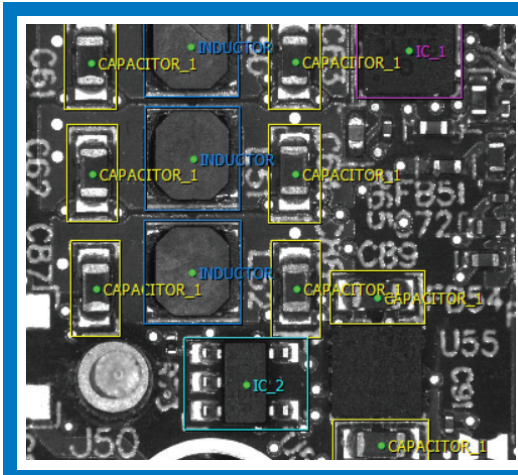
Flexible Machine Vision at the Edge

Introducing BOA3™

Teledyne DALSA's next generation AI-powered smart camera designed to meet the needs of the most complex, demanding machine vision applications.

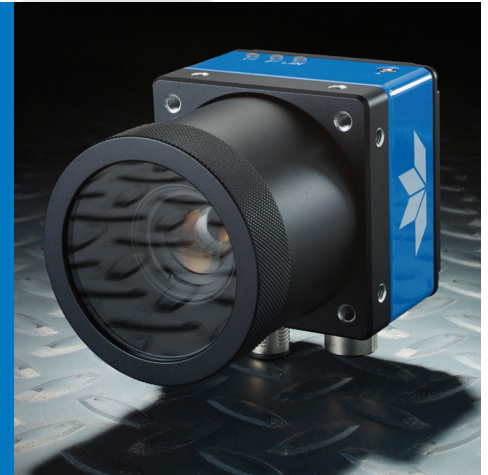
CAPTURE, PROCESS, CONTROL AT THE EDGE

- Resolutions 1.2 to 12 megapixels
- Quad-core processor
- Broad range of onboard I/O
- Compact, rugged, IP67 enclosure
- Run AI inspection models on-camera
- No-code machine vision development



Software Included

- Support for AI Classification and AI Object Detection
- Includes full toolkit of inspection algorithms and preprocessors
- Practical, straightforward interface for new or experienced users



Achieve 100% Quality Inspection with a broad set of machine vision and automation tools.

BASIC GEOMETRY	ADVANCED GEOMETRY	FEATURE RECOGNITION	READING	IMAGE PROCESSING	MORE
Point/Edge	Contour	Match/Search	Barcode 1D/2D	Intensity Statistics	Copy and Paste
Distance	Bead	Count/Blobs	Barcode Grading	Preprocessors	Built-in Tolerances
Angle	Thread	Verify	Grayscale OCR	Graphics Overlays	Custom Scripting
Tip	Spring	AI Object Detection	Binary OCR	Color Meter	Math Functions
Arc	Caliper	AI Classification	OCV	Focus Meter	String Functions
Circle	Rake			Calibration	PLC Communication
	Concentric Circles			Origin Control	Image Logging

TECHNICAL SPECIFICATIONS		BOA3 SMART CAMERA FEATURES		
		CMOS Area Scan, Global Shutter		
		1.2M	5M	12M
Sensor	Resolution	1280 x 960	2560 x 1936	4096 x 3072
	Pixel Size	3.7 µs	2.8 µs	2.8 µs
	Format	1/3"	1/1.8"	1"
	Frame Rate	50 fps	35 fps	13 fps
	Color	Mono	Mono	Mono
	Partial Scan Modes	Half 1280 x 480 @ 75 fps	Half 2560 x 968 @ 70 fps	Half 4096 x 1536 @ 25 fps
Lens Options	C-Mount	C-Mount	C-Mount	C-Mount
	S-Mount with lens: 6 mm, 8 mm, 12 mm, or 16 mm			
Illumination	Built-in LED Ring Light Red, Blue or White	N/A	N/A	N/A
Memory Storage	5GB Solutions, Images			
Processor	CPU 1.6 GHz Quad Core, 4 GB			
Connections	1 Gigabit Ethernet PoE, Serial RS-232, Encoder			
Inputs	4 opto-isolated, 12-30 VDC, Switching time 200 µs			
Outputs	4 opto-isolated, 200 mA max load at 24V, Switching time 200 µs			
Communications	Modbus, TCP/IP			
Image Logging	FTP			
Material	Aluminum			
Dimensions	60 mm x 60 mm x 50 mm			
Mounting	12 x M4x0.7			
Protection Rating	IP67			
OS	Camera setup on Windows			
Power	24V 300 mA or PoE Type 1 IEEE 802.3af			
Operating Temperature	-10°C – 50°C			
Access Control	Password Protected (user option)			
Software Utilities Included	Nexus Connection, file manager, and update utility for handling BOA Cameras			
	iDiscover Camera network discovery and IP address resolution tool			
	BOA Emulator Offline emulator for developing applications using image files			
	Report Generator Creates documentation of parameters and settings			
Camera Setup Parameters	iDisplay Operator interface software for viewing single or multiple cameras during runtime			
	Trigger Source Strobe/Output Pulse World Calibration Internal Timer Image Brightness Lens Correction Trigger Delay Focus Measurement Color Calibration			
API	C++, C#, and Visual Basic® in Microsoft® Visual Studio®			

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Revision Number:
Revision Date: 2024 09 20