BOA Vision System

Benefits

- Fully integrated smart vision system
- Mono and Color CCD sensor options
- Ultra small form factor 44 x 44 x 44 mm
- Industrial IP67 Housing
- Easy application setup via Laptop or PC
- M4 mounting holes on each surface
- Connects to standard vision lights
- Utilizes factory M12 style cordsets
- No software to install

Specifications

- 256MB Job Memory
- 256MB Program Memory
- Processor: DSP + CPU
- Sensor: 1/3" CCD
- Resolution: 640x480
- Lamp: External
- Inputs: 2 Opto
- Outputs: 2 Opto
- Comm: Ethernet/RS232
- Power: 12-30V
- Temp: 0-45C
- Protection: IP67
- Mount: 8 M4 threaded
- Compliance: CE, RoHS

Overview

Perfect Blue Vision

BOA is a fully integrated vision system in a compact "smart" camera format. Packaged complete with application software, BOA offers scalable vision solutions to satisfy a wide range of application needs from positioning robotic handlers to complete assembly verification.
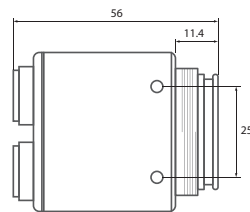
BOA's small form factor and 360° mounting capabilities allow it to integrate easily into existing production lines, machinery or moving equipment. Rated for IP67 deployment, BOA can be installed in harsh or washdown factory environments without the need for costly protective enclosures. An optional cover is available that screws over the C mount lens for these applications.

To simplify and reduce implementation costs, BOA utilizes standard industrial M12 cordsets for power, communication and lighting control. For applications that demand single cable solutions, BOA can be powered through the Ethernet cable. In this configuration, passive Power over Ethernet is supplied from a low cost breakout module inside the control panel.
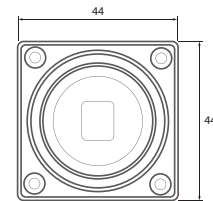
Embedded within BOA is iNspect application software. This easy to use, graphical point and click interface allows 1st-time and experienced users alike to rapidly prototype and deploy vision solutions. iNspect offers depth of tools and flexibility to satisfy a vast and diverse range of inspection requirements and supports standard communication protocols, such as Modbus and Ethernet/IP, for seamless connection to complementary control devices.

Included with BOA is a fully functional software emulator that allows users to develop or debug applications offline. Runtime Images can be saved to the offline PC using BOA's Ethernet interface. The emulator maximizes machine up time during application development and maintenance.
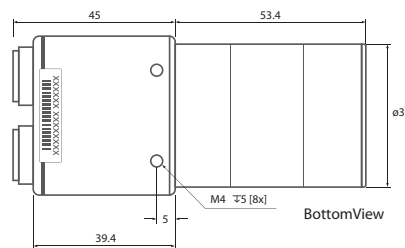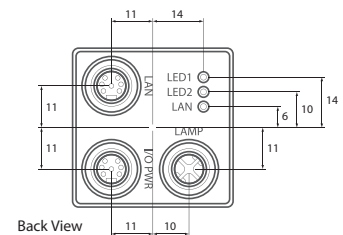
Mechanical Specifications

Side View

Front View

BottomView

Back View

PHYSICAL INTERFACING

Lamp	5 pin M12 style connector for providing power and strobe control to external lights
I/O	8 pin M12 style connector provides system power, inputs and outputs
LAN	8 pin M12 style connector provides fast Ethernet for setup and communications. Supports passive Power over Ethernet
Status	3 LED status indicators provide activity and device health feedback
Cables	Standard M12 industrial cordsets offer cost effective cabling solutions
Mounting	M4 threaded holes on each surface support 360° direct mounting
Lens	Supports a standard C mount lens with an optional protective cover
Enclosure	Machined Aluminum with anodize/paint finish

Pinouts				
	Pin	LAN	I/O	Lamp
	1	PWR	TRIG	PWR
	2	n/c	PWR	RS232 Rx
	3	GND	IN1	GND
	4	TXD-	OUT1	STROBE
	5	RXD+	IN CMN	RS232 Tx
	6	TXD+	OUT0	
	7	n/c	GND	
	8	RXD-	OUT CMN	

APPLICATION INTERFACING

Setup	Solutions are built using the embedded iNspect Express interface. The application is accessed via a web browser from a standard PC or laptop. iNspect offers a comprehensive toolset and directly connects to a variety of Ethernet ready factory devices.