

# **BOA Smart 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
- 512MB Program Memory
- · Processor: DSP + CPU
- Sensor: CCD
- Resolution: 640x480 to 1600x1200
- Lamp: ExternalInputs: 2 OptoOutputs: 2 Opto
- · Comm: Ethernet/RS232
- Power: 12-30V
  Temp: 0-45C
  Protection: IP67
  Mount: 8 M4 threaded
  Compliance: CE, RoHS

#### Overview

## Smart Vision for Automation

BOA is a highly integrated vision system in a compact "smart" camera format designed specifically for industrial use. Packaged with choice of embedded software, BOA offers manufacturers a robust and flexible automated inspection system that is easy to setup and deploy on the factory floor.

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 wash down 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.

BOA vision systems are offered in 3 software defined models. BOA INS and BOA IDR are based on Teledyne DALSA's iNspect Express software. BOA IDR has a reduced tool set ideal for identification applications. The BOA PRO model is based on Teledyne DALSA's advanced Sherlock software. All models support standard factory communication protocols, such as Ethemet/IP, Modbus and Profinet, for seamless connection to complementary control devices.

BOA vision systems are available in a range of resolution for both monochrome and color applications with three performance options: BOA (700MHz), BOA50 (1GHz) and BOA200 (1.2GHz dual core).

Camera I	N o de I		Sensor	Resolution	
PERFORMANCE	SOFTWARE	640X480	1024X768	1280X960	1600X1200
BOA	INS	<b>1</b> / <b>1</b>	<b>1</b> / <b>1</b>	<b>1</b> / <b>1</b>	
	IDR	•	•	•	
B0A50	INS	<b>1</b> / <b>1</b>	<b>1</b> / <b>1</b>	<b>1</b> / <b>1</b>	<b>•</b> )/ <b>•••</b>
	IDR	•	•	•	•
	PR0	<b>1</b> / <b>1</b>	<b>1</b>	<b>1</b> / <b>1</b>	<b>1</b> / <b>(1)</b>
B0A200	INS	<b>1</b> / <b>1</b>	<b>1</b> / <b>1</b>	<b>1</b> / <b>1</b>	<b>①</b> / <b>●</b>
	IDR	•	•	•	•
	PR0	<b>•</b> / <b>•</b>	<b>1</b> / <b>1</b>	<b>1</b> / <b>1</b>	<b>①</b> / <b>●</b>



# **BOA Smart Vision System**

#### EMBEDDED SOFTWARE OPTIONS

#### **BOA INS**

The standard product is offered with our iNspect Express application software. This interface combines ease-of-use with a common set of tools and capabilities that can be applied to a multitude of inspection applications.



- · All-inclusive vision application
- Easy to use "point and click" interface
- Flexible tool set good for many applications
- Integrated factory communications
- Includes scripting for advanced users
- · Standard operator interface
- · Supports multiple languages
- · Fully capable offline emulator

#### **BOAIDR**

The IDR version is offered with a subset of iNspect Express tools that apply only to identification, tracking and associated verification applications. BOA IDR is a good choice for manufacturers who need to inspect product markings for correctness or traceability.



- · All-inclusive vision application
- Reduced tool set for ID applications
- Decodes all popular 1D barcodes
- · Decodes 2D Matrix codes
- Reads and verifies printed characters
- Learns and finds patterns & features
- · Variant of iNspect Express
- Fully capable offline emulator

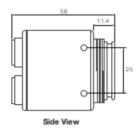
#### **BOA PRO**

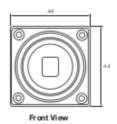
The Pro version is offered with our coveted Sherlock application software. Ideal for vision integrators, Sherlock provides the design flexibility and tools to tackle a diverse range of applications across all industrial segments.

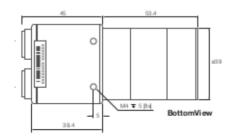


- All-inclusive vision application
- Very flexible design interface
- Advanced tool set for most applications
- · Single step program debugging
- Integrated factory communications
- JavaScript script interface with intelliSense
- ActiveX control for custom HMI design
- Fully capable offline emulator

### PHYSICAL INTERFACING







www.teledynedalsa.com

