

BOA™ Spot Vision Sensors



Features and Benefits

- Integrated light, lens and processing
- Standard and high resolution sensor options
- M12 (standard) or C-mount lens options
- Easy-to-use GUI
- Embedded vision tools for matching, counting, feature finding and measuring applications
- Built-in factory communication protocols
- FTP image transfers
- Hardware relearn and job switching
- Remote monitoring
- Compact industrial enclosure
- Low overall cost of ownership

Overview

BOA Spot vision sensors offer simplicity, affordability and reliable inspection performance for error-proofing applications.

The BOA Spot vision sensor combines the power and flexibility of a BOA vision system with integrated optics, light and easy-to-use setup software to deliver high value capabilities at a low cost of ownership.

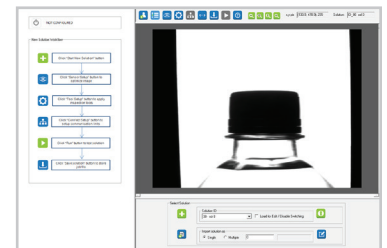
Included within the BOA Spot vision sensor is a set of robust vision tools for part locating, counting, measuring and feature or defect detecting applications. These tools can be combined and used multiple times to solve simple or complex inspection tasks that are beyond the capabilities of traditional sensors.

Inspections using BOA Spot 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 is being initially offered in 4 models, differentiated by sensor resolution and software capabilities. The “Standard Level” models offers a basic set of inspection tools for presence/absence and measurement applications. The “Expanded Level” models offer additional tools and advanced capabilities for more complex tasks.

BOA™ Spot Vision Sensors

| | | BOA Spot MODELS | | | |
|-----------------|---------------------------------|---|----------|--|----------|
| | | 0640M-SL | 1280M-SL | 0640M-EL | 1280M-EL |
| Setup Interface | | Inspect Express | | | |
| Job Storage | | 32 | | | |
| Sensor | Type | 1/3" Mono Global Shutter | | | |
| | Format | 640x480 | 1280x960 | 640x480 | 1280x960 |
| | Rate | 45 fps | 30 fps | 45 fps | 30 fps |
| Lens | M12 Models | 6, 8, 12 or 16mm (installed) | | | |
| | C-Models | 6mm - 50mm | | | |
| Light | M12 Models | 6 LED White, Red or Blue Ring Light (installed) | | | |
| | M12 or C Models | 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 | | | | |
| Vision | Location | Pattern Edge | | Pattern Edge Circle | |
| | | Pattern Edge Brightness Area | | Pattern Edge Brightness Area Contour | |
| | Counting | Edge | | Edge Pattern | |
| | Measuring | Distance | | Distance Angle Arc, Circle | |
| | | | | | |
| Enclosure | Material | 6061 Aluminum | | | |
| | Dimensions | 61mm x 58mm x 57mm | | | |
| | Mounting | 8 x M4 | | | |
| | Weight | 0.2kg | | | |
| | 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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