A quick solution for packaging lines, food and beverage industries, automotive and electronics plants, the SVS series combines sophisticated technology with an extremely simple configuration. Only a few minutes of training are required to use either. These sensors represent an easy-to-use solution for all vision control applications.

With a fast frame rate of 60 fps (60 images per second), Ethernet communication, a teach button, 640 x 480 pixel resolution and a total of 9 inspection tools, Datasensor SVS sensors are the best value for feature-packed smart vision sensors on the market. Inspection tools available include:

- Pattern match
- Contour match
- Positioning verification
- Width comparison
- Edge count
- Brightness check
- Contrast comparison
- Character verification (OCR)
- New Unique 360° pattern match
- Character verification (OCR)
- Object recognition
- Flexibility verification
- Angle adjustment
- High-speed communication
- Easy-to-use software

Datasensor SVS series Smart Vision Sensors are available in two lines:

- SVS1 models guarantee the quickest and easiest setup via hand-held configurator
- SVS2 models can be connected to a PC and offer multiple controls on the same inspection setup

These sensors provide a low-cost solution to machine vision and accurate, reliable and unparalleled inspection. Ultra-compact, powerful and easy-to-use, these smart vision sensors work for a variety of applications.

The packaging industry uses vision sensors for everything from inspecting tamper-evident safety seals to checking bottle caps and labels. The automotive industry is also one of the main industries using vision sensors for assembly verification, inspection, and identification. For inspection and verification of components, as well as date and lot code checking, the pharmaceutical and medical industries also utilize vision sensors. As for semiconductor industries, vision sensors are used for wafer inspection or identification.

Datasensor SVS series Smart Vision Sensors are available in two lines: SVS1 models guarantee the quickest and easiest setup via hand-held configurator. SVS2 models can be connected to a PC and offer multiple controls on the same inspection setup.

To see our complete line of sensors, download the IDEC-Datasensor short form catalog available online at:

www.IDEC-DS.com
SVS1
The SVS1 series is the easiest solution for machine vision applications. It's suitable for applications that require only one control inspection.

The setup is quick and intuitive using the 3.5" color Display Configurator. The Configurator can provide real-time monitoring of the images, but is not required during the functioning of the sensor, so it can be disconnected and used to setup multiple sensors. SVS1 is able to carry out 7 tools of inspection. Up to 8 different inspections can be stored in SVS1.

- 7 Inspection Tools
- High image quality 640 x 480 pixels
- Memorization of 8 inspections
- Capture up to 60 fps (frame per second)
- Compact size
- Quick and easy setup via 3.5" LCD Configurator
- Up to 600mm operating distance, selectable field of views

SVS2
Datasensor SVS2 is a completely embedded device. The optic, the red LED illuminator and the electronics are included in an extremely compact housing. The sensor is configured via PC through Ethernet communication. It also allows users to remotely monitor the sensors throughout the local area network (LAN). Configuration software is included in the product and has been developed to lead the customer through the configuration process step-by-step. The SVS2 is extremely powerful storing up to 20 inspections, and suitable for multiple controls in a single inspection. In fact, up to 32 controls can be analyzed in a single pass.

SVS2 is the only vision sensor on the market able to offer an image processing tool that can recognize objects on the field of view independently from any rotation. The 360º Geometric Pattern Match has been especially developed to store the actual characteristics of the object that will be tracked and resolve them during operation with total immunity to position and orientation changes.

- 8 Inspection Tools
- High image quality 640 x 480 pixels
- Memorization of 20 inspections
- Capture up to 32 controls per inspection
- Up to 32 controls per inspection
- Compact size
- Quick and easy setup via 3.5" LCD Configurator
- Up to 600mm operating distance and selectable lenses: 6mm, 8mm, 12mm, 16mm
- Logic gates combine inspection tool results before output

Evaluation Tools

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<tr>
<th>Inspection Tool</th>
<th>Description</th>
<th>Example</th>
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<tr>
<td>Pattern Match</td>
<td>Compare pattern of reference and targeted object.</td>
<td><img src="image1" alt="Pattern Match" /></td>
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<td>Shape control</td>
<td><img src="image2" alt="Contour Match" /></td>
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<td>360º Pattern Matching</td>
<td>Compare pattern of reference and targeted object when object is at any angle.</td>
<td><img src="image4" alt="360º Pattern Matching" /></td>
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<td><img src="image5" alt="Position Verification" /></td>
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Applications

Object Counting
Description: Control the number of bottles present in the package.
Tool: Brightness, one per bottle or Edge Count.

Product Orientation
Description: Check product orientation based on the cap position.
Tool: Position or Edge Count.

Filling Control
Description: Determine fill level according to the distance between the liquid level and the cap.
Tool: Position.

Shape Control
Description: Cap integrity verification.
Tool: Contour match.

Label Positioning
Description: Label positioning control based on the distance between the label and the border of the cap.
Tool: Pattern Match and Position.

Overprinting Verification
Description: Check Datamatrix presence on PCB.
Tool: Pattern Match or Brightness.

Label Control
Description: Expiration date verification and barcode printing.
Tool: Position locator and Pattern Match or OCV.

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