

## DATASENSING SMART-VS

Smart sensor based on machine learning

SMART-VS-MR-5-150-WH-O

Smart VS standard, M12 connector, 150m, 3 digital output

- The first smart sensor based on Machine Learning
- Ease of use and installation
- Up to 150mm operating distance
- AI enabled and MLAS - Machine Learning Assisted Setting
- **\*\*PLUS version now available\*\***



### PRODUCT DESCRIPTION

The Smart vision sensor or Smart-VS is a new, unique and innovative product from Datalogic. Designed for automation applications, it can quickly, easily and reliably detect 'good' and 'not good' objects.

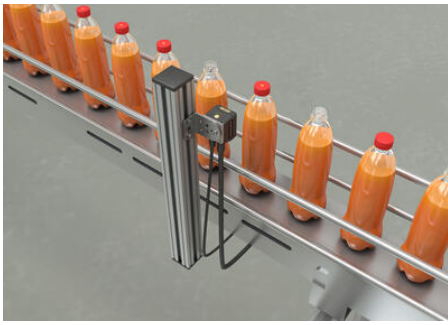
The Smart VS can easily be set up by simply pushing a button and following 3 easy steps, ease of use for all kinds of users and installers. There is no expert programming needed, no vision tool setting, and no external custom monitoring tools necessary to achieve object detection.

The Smart VS has a powerful 'System on Chip' and customised machine learning algorithms, making it reliable in response time which is deterministic in any detection condition. The features of the Smart VS make it the perfect solution for the following applications: the need to check the presence of labels and caps when filling bottles and vials; orientation of objects for proper labelling, independently by material, by color and format of the objects.

The versatility of the Smart VS makes it suitable for use in most varied sectors, such as automotive or automatic assembly of mechanical or electronic parts, but it also finds some of its greatest uses in the food and beverage, pharmaceutical and cosmetics packaging sectors.

## TECHNICAL DATA

<b>Dimension (mm)</b>	78 x 47 x 38
<b>Distance max</b>	150 mm
<b>Distance min</b>	50 mm
<b>Integrated communication interface</b>	Ethernet 10/100Mbit/s
<b>IP class</b>	IP65, IP67
<b>Light type</b>	White LED Polarised illuminator
<b>Material</b>	Aluminium
<b>Max. images to handle</b>	6 images
<b>Output</b>	NPN, PNP, Push/Pull
<b>Output data</b>	Data valid, Good, No good
<b>Performance</b>	20pcs per second max
<b>Power consumption</b>	4.2 W
<b>Reading Field of View</b>	22mm x 16mm @50mm, 55mm x 41mm @ 150mm
<b>Response time</b>	50 ms
<b>Storage temperature max</b>	70 °C
<b>Storage temperature min</b>	-20 °C
<b>Supply voltage</b>	10-30 V DC
<b>Temperature operational max</b>	50 °C
<b>Temperature operational min</b>	-10 °C
<b>Weight</b>	173 g
<b>Viewing angle</b>	19°

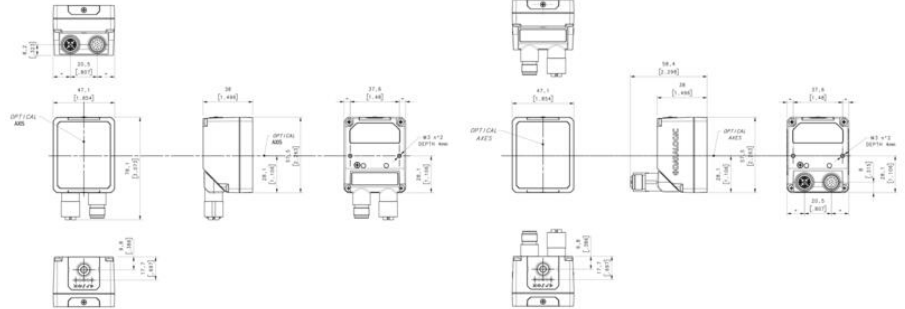


Application name	Solved cases (OK / NOT OK)	
Check label presence		
Cap orientation		
Cap presence		
Check printing on label		



### Application name

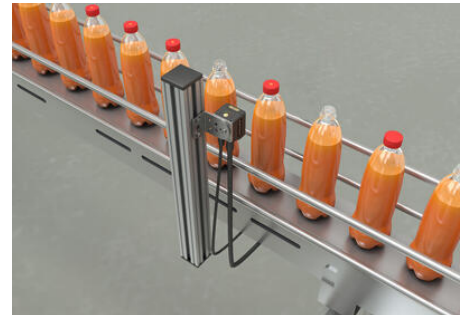
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Pin	Name	Color	Function
1	Vcc	Marrone	Power supply input voltage +
2	GND	Blu	Power supply input voltage -
Connector case: Chassis			
4	I1A	Yellow	I1A Trigger Input A (Polarity Insensitive)
5	I1B	Pink	I1B Trigger Input B (Polarity Insensitive)
13	I2A	White/Green	I2A Remote Teach A (Polarity Insensitive)
3	I2B	White	I2B Remote Teach B (Polarity Insensitive)
9	O1*	Red	Data Input PP
8	O2*	Grey	GOOD Output PP
14	O3*	Yellow/Brown	NO-GOOD Output PP



Pin	Name	Function
1	TX+	Transmit data (positive pin)
2	TX-	Transmit data (negative pin)
3	RX+	Receive data (positive pin)
4	RX-	Receive data (negative pin)
5	nc	Not Connected
6	nc	Not Connected
7	nc	Not Connected
8	nc	Not Connected



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