

PHOTOELECTRIC DEVICES FOR INSPECTION

SVS1 series

The quickest plug-and-play vision sensor

- Real embedded vision sensor
- Quick setup via VSC unit
- No PC needed
- Real time monitoring
- Single control inspection



NEW SERIES

The **SVS1** series is the easiest solution for the machine vision applications. **SVS1** relies on the concept of a completely embedded vision sensor. The setup is very quick and intuitive thanks to the VSC unit, the external configurator with 3.5" colour display and push-buttons. No PC is needed for the configuration. The image processing is completely carried-out inside the sensor, which is able to work in stand alone mode after the setup. The VSC unit can provide a real time monitoring of the images, but it is not required during the functioning of the sensor and so it can be disconnected and used to setup multiple sensors. **SVS1** allows a single control on each image, but offers different kind of tools to solve several tasks: product orientation on conveyor belts, presence/absence on assembly lines, overprinting controls on packaging machineries.

SVS2 series

The sharpest stand alone vision sensor

- Flexible setup via PC
- Ethernet communication
- Object recognition or identification tools
- 360° pattern matching
- Multiple control inspections



NEW SERIES

The **SVS2** series of vision sensors presents all the characteristics able to solve artificial machine vision problems in a flexible and intuitive manner. The setup of the **SVS2** is carried-out on a PC using Ethernet connection, ensuring a high level of flexibility. A Graphic User Interface based on a Wizard system leads step by step the user in the creation of the inspection. Different models according to different software tools are available: Object Recognition, Advanced Object Recognition (with 360° pattern matching), Identification (Barcode, Datamatrix and OCV). The sensor can store up to 20 different inspections, that can be selected using digital pulses or via Ethernet. The sensor is able to contemporarily carry-out different controls on the same object, thus reducing installation time and costs compared to using more devices in the same application. **SVS2** is the right solution when normal photoelectric sensors can not respect the application requirements and represents an user-friendly and cost-effective alternative to the traditional vision systems.

SCS1 series

One-for-all Smart Camera Sensor

- CMOS 640x480 image sensor
- Integrated or external illuminator
- Measurement, control and inspection
- OCR/OCV, DataMatrix and BarCode
- Ethernet port and RS232 / RS485



NEW PERFORMANCES

The **SCS1** Smart Camera offers all the functions of a vision system, together with the simplicity and costs of an advanced sensor. Multiple controls available: measurement, inspection, character recognition and code reading. The new 'Identification' models present code reading and verification and OCR/OCV, BarCode and DataMatrix functions. The illuminator can be integrated or external. The sensor can be configured via Host PC through the Ethernet port and works in a stand-alone mode. Two PNP outputs activated according to the inspection, configurable inputs and RS232 and RS485 serial interfaces are present on the standard M12 8-pole connector. The standard CS or C-mount optics are interchangeable.

SIL series

Illuminators for industrial artificial vision

- Linear, areolar or puntiform models
- Continuous or strobe light versions
- Red, blue, green, white or IR light LED
- Strong mechanical resistant housing
- Laser visible red emission






NEW PERFORMANCES

The solid state **SIL** illuminators have been developed to offer a complete range of industrial lighting solutions for machine vision, illumination for bar code readers and visual checking and also lightening for microscopy. Many different **SIL** models are available including Line-, Area-, Back-, Ring- or Spot-Light, able to cover all the main industrial lighting requirements. Red, blue, green, white or IR emission LEDs and lenses with different emission angles are available on demand. Furthermore, a new laser visible red emission version is available. Models with continuous or strobe light with a control unit also are available. The sturdy metal housing guarantees high mechanical protection, connection is fast and easy thanks to standard M8 4-pole connectors.

PHOTOELECTRIC DEVICES FOR INSPECTION


Smart Camera Sensors



SERIES		SCS1	SCS1-ID
Category		Smart camera	Smart camera
Resolution		640 x 480	640 x 480
Frame per second		up to 150	up to 150
Illuminator		integrated or external via M8 conn.	integrated or external via M8 conn.
Connectivity		Ethernet	Ethernet
Serial interface		RS232 / RS485	RS232 / RS485
Configuration		USEasy® PC GUI	USEasy® PC GUI
Functioning		stand-alone	stand-alone
Lenses		C or CS-mount	C or CS-mount
Functions		measurement and inspection	measurement and inspection OCR / OCV Barcode and Datamatrix
TECHNICAL DATA	Power supply	Vdc Vac Vac/dc	24   II3
	Output	PNP NPN NPN/PNP relay (triac) other	.
	Connection	cable connector terminal block	M12 8-poles / M8 4-poles / RJ45
	Approximate dimensions (mm)		75 x 100 x 40
	Housing material		aluminium
	Mechanical protection		IP40

Illuminators



SERIE		SIL	SIL	
Models		Line - Area - Ring - Spot - Back	Laser	
Driver		integrated or external	integrated	
Light source		power LED	Laser 650 nm	
Lenses		DATASENSOR Power Optics		
Light emission		red / green / blue / white / IR	red	
Emission angles		6° - 25° - 45° - 10x30°	60°	
Strobe signal		5...24 Vdc	0...30Vdc	
Light intensity at 500 mm		250...1000 lux		
Laser class			5 mW 	
TECHNICAL DATA	Power supply	Vdc	24	
		Vac		
		Vac/dc		
	Output	PNP		
		NPN		
		NPN/PNP		
		relay (triac)		
		other		
	Connection	cable	M8 4-poles	M12 4-poles
		connector		
	terminal block			
Approximate dimensions (mm)				
Housing material		aluminium	aluminium	
Mechanical protection		IP65	IP65	

PHOTOELECTRIC DEVICES FOR INSPECTION


Smart Vision Sensors



SERIES		SVS1	SVS2
Category		Vision Sensor	Vision Sensor
Resolution		640 x 480	640 x 480
Frame per second		up to 60	up to 60
Illuminator		integrated	integrated
Connectivity		configurator connection	Ethernet
Serial interface			RS 485
Configuration		VSC configurator	PC Graphic user interface
Functioning		stand-alone	stand-alone
Lenses		6/8/12 mm	6/8/12 mm
Functions		measurement & inspection	measurement & inspection or identification
TECHNICAL DATA	Power supply	24	24
		Vdc	
		Vac	
		Vac/dc	
	Output	.	.
		PNP	
		NPN	
		NPN/PNP	
		relay (triac)	
		other	
Connection	2x M12 8-poles	M12 8-poles / M12 4-poles	
	cable		
	connector		
	terminal block		
Approximate dimensions (mm)	58 x 52 x 40	58 x 52 x 40	
Housing material	aluminium/plastic	aluminium/plastic	
Mechanical protection	IP54	IP54	

Configurators and Monitors



SERIE		VSC	VSM
Display		3.5" TFT LCD	3.5" TFT LCD
Functions		SVS1 sensor setup real time monitoring	SVS2 sensor monitoring
Resolution		320x240	320x240
Mounting		DIN-Rail or panel	DIN-Rail or panel
User interface		8 push-buttons 8 signalling LEDs	8 push-buttons 8 signalling LEDs
TECHNICAL DATA	Power supply	Vdc	via SVS1 sensor
		Vac	
		Vac/dc	
	Output	PNP	
	NPN		
	NPN/PNP relay (triac)		
	other		
Connection	cable		
	connector	M12 8-poles	n°2 M12 8-poles
	terminal block		
	Approximate dimensions (mm)	96 x 96 x40	96 x 96 x40
	Housing material	plastic	plastic
	Mechanical protection	IP54	IP54