SMART-VS

959971320

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

OVERVIEW

- Smart-VS$^+$ model available to handle more images and more connectivity features
- Machine Learning Assisted Setting
- No vision Tools programming required
- No need of skilled installers just photosensor like setting
- Deterministic response time 50 ms (Standard model -MR-)
- Deterministic response time 20 ms (PLUS model -PL- depending on n. of images)
- 50...150 mm detection distance
- TEACH Button and comprehensive UI with 5 status LEDs
- Electronic focus control

TECHNICAL FEATURES

Detection properties

Nominal sensing distance	400 mm
Sensitivity adjustment	TEACH-IN push button + WEB based GUI (through Ethernet)
Minimum sensing distance (blind zone)	50 mm

Application

Function Principle	Object detection classification 6 classes + Anomaly detection

Description	Compact block style case
Optic position	Radial 90°
Functions	Object detection classification 6 classes + Anomaly detection

Outputs

Output type	4 NPN/PNP/PP, 1 Ethernet 10/100 (M12 8-pin X-coded)
Output Function	Data Valid / GOOD / NO GOOD
Switching frequency	50ms
Response time	15…50 ms (deterministic classifier) 200 ms max (non det. anomaly)

Electrical data

Operating Voltage	10…30 Vdc
No-Load supply current	0.40 - 0.14 A
Load current	≤100mA
Leakage current	≤ 400 µA
Output voltage drop	100 mA
Max ripple content	≤10%
LED indicators	6 LED yellow (output, run, trigger, good, bad, not used) + 2 on back (1 blue power, 1 yellow Ethernet)
Short-circuit protection	Yes
Reverse Polarity Protection	Yes

Emission	LED white 4 polarized white H.P. LEDs + 2 LED red aim + 1 LED green spot + 1 LED green spot
Interference to external light	according to EN 60947-5-2 : 2020
Impulsive Overvoltage Protection	Yes
Power Consumption	0.17…0.5 mA @30 V …10 V (5W) @30V…10V (5V)
Insulation resistance	>20 MΩ 500 Vdc, between electronics and housing
Contact resistance	500 Vac 1 min., between electronics and housing

Mechanical data

Dimensions	47 x 58 x 38 mm
Housing Material	Metal - Aluminium / PMMA
Connections	M12 plug 8 pin
Active Head Material	PMMA
Storage temperature	- 25°C…+70°C
Material	PMMA
shaft material	Yellow rubber
Diameter/Dimension	Cubic

Test/Approvals

Approvals	CE CSS
EMC compatibility	EN 60947-5-2

Shocks and vibrations	0.5 mm amplitude, 10 … 55 Hz frequency, for every axis (EN60068-2-6)

Generical Data

CPU	Sistem On Chip
Camera Interface	10/100 Mbit/s Ethernet
Dimensions	47 x 58 x 38 mm
Operating Temperature	-25…70°C
Mechanical Protection	IP67
Resolution	320x240 pixels
Imager	50 (total anomaly), 50 (total classifier)
Shutter	Rolling
Frame rate (FPS)	20

Optical Data

Mono/Color	Monochrome