



# S3N

## 95B010112

**S3N-PR-5-B01-PD RRX POL PNP DARK  
M8**  
MINIATURE PHOTOELECTRIC SENSOR

## OVERVIEW

- All models with visible and bright red emission
- LED and Laser emission models
- Multiple Background suppression functions
- Shiny and clear object detection
- Single, Double trimmer & Push Button models
- Diffuse proximity up to 100 cm
- Background suppression up to 800 mm (LED trimmer version)
- Polarized RRX 7 m (Red LED emission)
- Polarized RRX 12 m (Red Laser emission)
- Through-beam 20 m and Laser 30 m
- Connection with 2 m Cable or M8 connector
- Rugged IP67 Plastic miniature case
- M3 threaded holes on the front side with metal inserts
- State of the art IO-Link connectivity with extended Smart Tasks



## TECHNICAL FEATURES

Detection properties

Nominal sensing distance	7m
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Sensitivity adjustment	1 turn trimmer
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Minimum sensing distance (blind zone)	0,05m
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### Application

Function Principle	Polarized retroreflective
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Notes	On R5 reflector
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Optic position	Radial 90°
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Functions	Polarized retroreflective
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### Outputs

Output type	PNP Don
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Output Function	Don
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Switching frequency	1kHz
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Response time	500µs
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### Electrical data

Operating Voltage	10...30VDC
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No-Load supply current	≤ 35mA
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Load current	≤100mA
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Leakage current	≤ 300 µA
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Output voltage drop	≤2V@Iload=100mA
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Max ripple content	≤10%
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LED indicators	yellow OUTPUT LED, green STABILITY LED
Short-circuit protection	Yes
Reverse Polarity Protection	Yes
Emission	LED Red (635nm)
Interference to external light	according to EN 60947-5-2 : 2020
Impulsive Overvoltage Protection	Yes
Insulation resistance	>20 MΩ 500 Vdc, between electronics and housing
Contact resistance	500 Vac 1 min., between electronics and housing
0,1μF @Vmax - 1μF @Vmin	Yes

#### Mechanical data

Housing material	Plastic Polymer Fiber Glass reinforced
Connections	M8 plug 4pin
Active Head Material	PMMA
Storage temperature	- 25°C...+70°C
Plug connector material	Metal
shaft material	POM, PMMA
Diameter/Dimension	Cubic

#### Test/Approvals

Approvals	CE cULus
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EMC compatibility	EN 60947-5-2
Shocks and vibrations	0.5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)
<b>Generical Data</b>	
Dimensions	11x31x19 mm
Operating Temperature	-25°C ... 55°C
Mechanical Protection	IP67

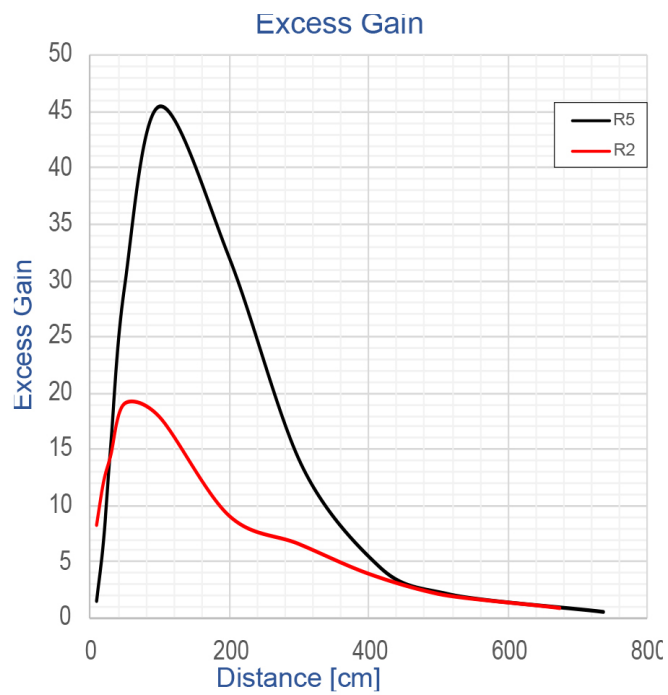
## CONNECTIONS

Electrical diagram



## OTHERS

Response curves



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