



Smart light grids SAS

SAS4-S060P3PS2W0A



Model Name > [SAS4-S060P3PS2W0A](#)
Part No. > [1209013](#)



At a glance

- Variable detection lengths from 120 mm up to 600 mm (in 160 mm increments)
- Set parameters via teach-in with no PC
- Simple teach-in setup
- Maximum range 4 m
- Response time 18 ms
- 25 mm resolution with 40 mm beam separation possible
- Highly immune to sunlight up to 150,000 lx
- Small blind zone < 11 mm

Your benefits

- Small, slim and sleek design enables easy integration into applications
- Capacitive teach-in button and LEDs make commissioning easier for complex solutions
- Slim and flat models offer flexible mounting options and optimize space while reducing damage
- Customized preset configurations or set parameters via one-touch teach-in with no PC
- Optical synchronization eliminates the need to lay cables, saving time
- Auto-teach and auto-muting enable Plug & Play. And, an alignment aid and “Click & Go” provide faster installation.



Features

Technology:	Sender/receiver
Task:	Switching light grid
Minimum detectable object (MDO):	Parallel beam: ≥45 mm
Beam separation:	40 mm
Optical light exit:	Slim

Number of beams:	16
Detection height:	600 mm
Cross beam/parallel beam:	Parallel beam active
Output 1:	Output 1 inactive, if light beam interrupted
Automatic teach:	Automatic teach inactive
Alignment aid:	With alignment aid
Muting function:	Muting function inactive
Configuration:	Without teach button with configuration software

Performance

Maximum range:	4 m ¹⁾
Minimum range:	Parallel beam: ≥0 mm
Response time:	Parallel beam: ≥19 ms ²⁾
Working range:	3 m

¹⁾ No reserve for environmental issue and deterioration of the diode ²⁾ With resistive load

Interfaces

Output type:	1 x PNP
Inputs:	Teach input
Connection type:	Short cable with connector M8, 4-pin

Mechanics/electronics

Wave length:	IR 950 nm
Supply voltage Vs:	DC 24 V _{DC} , ± 20 % ¹⁾
Power consumption sender:	136 mA ²⁾
Power consumption receiver:	70 mA ^{3) 4)}
Ripple:	< 5 Vpp
Output current I _{max} :	100 mA
Output load capacitive:	100 nF
Output load inductive:	1 H
Initialization time:	1 s
Dimensions (W x H x D):	25 mm x 672.4 mm x 8 mm
Housing material:	PMMA
Indication:	LED
Synchronization:	Optical
Enclosure rating:	IP 65
Circuit protection:	Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected
Weight:	80 g
Power consumption:	136 mA ⁵⁾
Aluminum stabilizer:	With stabilizer
Switching frequency:	500 kHz

¹⁾ Limit values ^{2) 3) 4) 5)} Without load

Ambient data

Protection class:	III
EMC:	EN 60947-5-2
Ambient temperature:	Operation: -25 ... 55 °C, Storage: -25 ... 70 °C
Ambient light safety:	Direct: ≥100,000 lx, Indirect: ≥150,000 lx ¹⁾
Vibration resistance:	5 g, 10 Hz ... 55 Hz (IEC 68-2-6)

10 g/DIN EN 60068-2-29/16 ms

Dimensional drawing

Receiver

Sender

Receiver dimensions:

- Total length: $L = DH + RM + 35.5 (1.40)$
- Top section width: $36.5 (1.44)$
- Top section hole diameter: $6.4 (0.25)$
- Section width: $18.5 (0.73)$
- Section hole diameter: $9 (0.35)$
- Bottom section width: $45.8 (1.80)$
- Bottom section hole diameter: $9 (0.35)$
- Bottom section thread: $M8$

Sender dimensions:

- Total length: $99 (3.90)$
- Top section width: $12.4 (0.49)$
- Section hole diameter: $3.8 (0.15)$
- Section width: $1.4 (0.06)$ at 45°

Formulas:

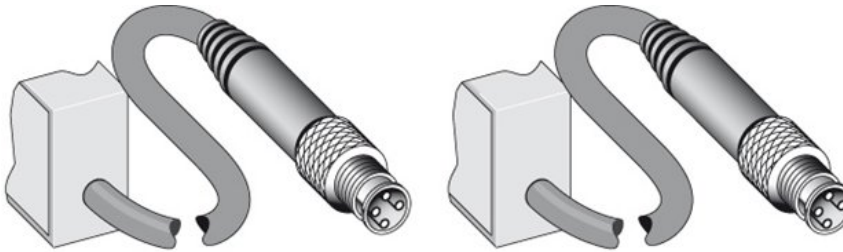
- $RM = (n \times RM) - RM$
- $DH = (n \times RM) - RM$

- |1| Last beam
- |2| Beam separation RM
- |3| DH - Detection height (n x 40 mm) - RM
- |4| First beam
- |5| Connection
- |6| Same distance
- |7| n = beam
- |8| m = mounting hole

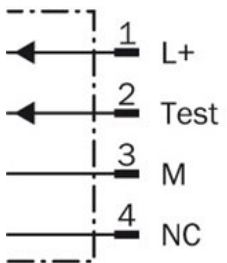
Adjustments



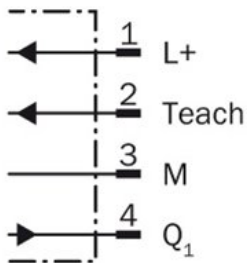
Anschlussart und -schema



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Receiver



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