DS₁

ODATALOGIC







AREASCAN™ DETECTION AND MEASUREMENT LIGHT **GRIDS WITH ANALOG OUTPUT**

- 4 mm resolution and 1 ms response time
- 100 to 300 mm controlled height
- Operating distance up to 4 m
- PNP digital and 0-10 V analog outputs
- Adjustment trimmer

APPLICATIONS

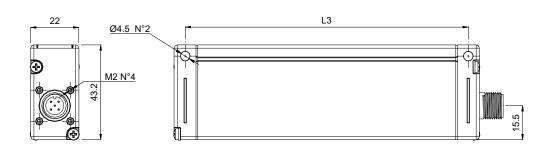
- Processing and Packaging machinery
- Food, Cosmetic, Pharmaceutical
- · Electronics and mechanical assembling
- Conveyor lines and sorting systems

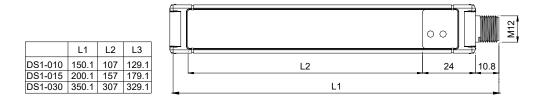
DS1				
Light array (controlled height)		100300 mm		
Resolution	47 mm			
Number of beams		1648		
Light emission		IR LED		
Response time		12,75 ms		
Setting		Trimmer		
Operating distance		0,150,8 m (SD)		
		0,152,1 m (LD)		
		0,24 m (HD)		
	Vdc	24V +/- 15%		
Power supply	Vac			
	Vac/dc			
	PNP	•		
	NPN			
Output	NPN/PNP			
	relay			
	other	010 V Analog output		
	cable			
Connection	connector	•		
	pig-tail			
Approximate dimensions (mm)		22x43x(150/350)		
Housing material		aluminium		
Mechanical protection		IP65		

TECHNICAL DATA

Power supply	24 Vdc ± 15%		
Consumption on emitter unit (TX)	150 mA max.		
Consumption on receiver unit (RX)	50 mA max. load excluded		
Light emission	IR LED 880 nm		
Setting	adjustment trimmer (mod. DS1PV)		
Indicators	yellow OUTPUT LED		
	green POWER ON LED		
Output	PNP; analog output		
Output current	100 mA max.		
Saturation voltage	1,5 V max.		
Response time	1 - 2,75 ms		
Connection	M12 4-pole connector (TX), M12 5-pole connector (RX)		
Dielectric strength	500 Vac, 1 min between electronics and housing		
Insulating resistance	>20 MΩ, 500 Vdc between electronics and housing		
Mechanical protection	IP65 (EN 60529)		
Vibrations	0,5 mm amplitude, 10 55 Hz frequency, for every axis (EN60068-2-6)		
Shock resistance	11 ms (30 G) 6 shock for every axis (EN60068-2-27)		
Housing material	black electro-painted aluminium		
Lens material	PMMA		
Operating temperature	0 50 °C		
Storage temperature	-25 70 °C		
	300 g (mod. DS1010)		
Weight	400 g (mod. DS1015)		
	600 g (mod. DS1030)		

DIMENSIONS



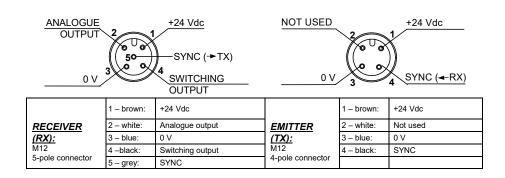


INDICATORS AND SETTINGS (TRIMMER VERSION)

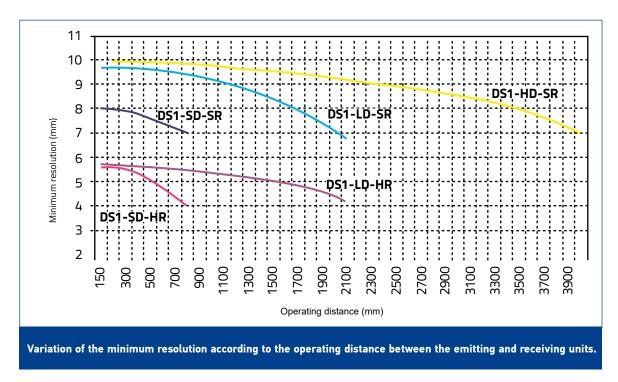


CONNECTIONS

M12 CONNECTOR



DETECTION DIAGRAMS



ODATALOGIC

MODEL SELECTION AND ORDER INFORMATION

OPTIC FUNCTION	OPERATING DISTANCE	SETTING	CONTROLLED HEIGHT & RESOLUTION	MODEL	ORDER NO
	0,8 m	n/a	100 mm (res.: 7 mm)	DS1-SD-SR-010-JV	957701170
			100 mm (res.: 4 mm)	DS1-SD-HR-010-JV	957701200
			150 mm (res.: 7 mm)	DS1-SD-SR-015-JV	957701180
			150 mm (res.: 4 mm)	DS1-SD-HR-015-JV	957701210
			300 mm (res.: 7 mm)	DS1-SD-SR-030-JV	957701190
			100 mm (res.: 7 mm)	DS1-LD-SR-010-JV	957701130
Measurement light curtain	2 m		100 mm (res.: 4 mm)	DS1-LD-HR-010-JV	957701120
			150 mm (res.: 7 mm)	DS1-LD-SR-015-JV	957701150
			150 mm (res.: 4 mm)	DS1-LD-HR-015-JV	957701140
			300 mm (res.: 7 mm)	DS1-LD-SR-030-JV	957701160
		Adjustment trimmer	100 mm (res.: 7 mm)	DS1-LD-SR-010-PV	957701250
			150 mm (res.: 7 mm)	DS1-LD-SR-015-PV	957701260
			300 mm (res.: 7 mm)	DS1-LD-SR-030-PV	957701270
	4 m	n/a	100 mm (res.: 7 mm)	DS1-HD-SR-010-JV	957701220
			150 mm (res.: 7 mm)	DS1-HD-SR-015-JV	957701230
			300 mm (res.: 7 mm)	DS1-HD-SR-030-JV	957701240

CABLES

	DESCRIPTION		MODEL	ORDER No.
Axial M12 Connector	4-pole, grey, P.V.C.	3 m	CS-A1-02-G-03	95A251380
		5 m	CS-A1-02-G-05	95A251270
		10 m	CS-A1-02-G-10	95A251390
	4-pole, U.L., black, P.V.C.	3 m	CS-A1-02-U-03	95ASE1120
		5 m	CS-A1-02-U-05	95ASE1130
		10 m	CS-A1-02-U-10	95ASE1140
		15 m	CS-A1-02-U-15	95ASE1150
		25 m	CS-A1-02-U-25	95ASE1160
	5-pole, grey, P.V.C.	3 m	CS-A1-03-G-03	95ACC2110
		5 m	CS-A1-03-G-05	95ACC2120
		10 m	CS-A1-03-G-10	95ACC2140
	5-pole, U.L., black, P.V.C	3 m	CS-A1-03-U-03	95ASE1170
		5 m	CS-A1-03-U-05	95ASE1180
		10 m	CS-A1-03-U-10	95ASE1190
		15 m	CS-A1-03-U-15	95ASE1200
		25 m	CS-A1-03-U-25	95ASE1210
		50 m	CS-A1-03-U-50	95A252700