



DS4 Standard

957650030

DS4-05-0450-S12-JE

DETECTION AND MEASUREMENT AREA SENSOR

OVERVIEW

Versatile area sensors for detecting and measuring in various industrial applications. Conveniently configured using IO-Link and wirelessly programmable through AppGUI for detailed parameter adjustments and advanced setups.



TECHNICAL FEATURES

Detection properties

Nominal sensing distance	0.2...5 m Transparent objects ($T = 0...50\text{ °C}$; $H \leq 1.5\text{ m}$): 10% (0.35 - 1.5 m) 20% (0.35 - 2.5 m) 30 % (0.35 - 4 m)
Beams space	5 mm
controlled height	450 mm
number of rays	90
Sensitivity adjustment	remote teach, IO-Link, AppGUI

Detection capability	≥ 3.5 mm (with Teach-In), 10 mm (without Teach-In)
Features and performances	
Detection capability	0
Application	
Description	DS4-05-0450-S12-JE 5mm H=450mm Eth
Outputs	
Output type	PNP or NPN or Push-Pull , 0...10 V, 4..20 mA, IO-Link, Ethernet TCP/IP
Output Function	Light array for detection and measurement
Electrical data	
Operating Voltage	19.2...28.8 Vdc
No-Load supply current	360 mA (emitter and receiver)
Leakage current	100 mA
Output voltage drop	2.5 V @ IL=100 mA
Time delay before availability	3.70 s
Short-circuit protection	Yes
Reverse Polarity Protection	Yes
Emission	Infrared (850 nm) Emitter + Receiver
Impulsive Overvoltage Protection	Yes

Protection against inductive loads	Yes
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Mechanical data

Material	Aluminium / PBT
Housing material	Aluminium
Optic window material	PMMA
Weight	1.4 Kg/m (single bar, without package)
Connections	M12 5 poles + 200 mm length cable TPU (TX), M12 8 poles + 200 mm length cable TPU (RX), M12 4 poles D code + 150 mm length cable TPU (ETH)
Active Head Material	PMMA
Storage temperature	-30...+70 °C
Humidity	15...95 % (without freeze)

Test/Approvals

Shocks and vibrations	10 mm / 3g, 5 ... 150 Hz frequency, (EN 60068-2-6 / Class 3M7 IEC TR 60721-4-3); 25g x 6 ms x 600 (EN 60068-2-27 / Class 3M7 IEC TR 60721-4-3)
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Accessories

Supplied Accessories	Fixing brakets
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Generical Data

Dimensions	35 x 40 x 460.5 mm
Operating Temperature	-30...+50°C (without freeze)
Mechanical Protection	IP65 IP67

HMI/UI

LED indicators

TX: Green (Power ON), Yellow (Emission range) Red (Test, failure, Firmware ongoing update), Blue (Emission range, Firmware update completed) RX: Green (Power ON), Yellow (Status output, Connection and teach-in active) Red (Hardware Errors, Invalid con

**Datasensing
S.r.l.**

Strada S.Caterina, 235
41122 Modena (MO)
Tel. 059 420411
Fax 059 253973
E-mail
info@datasensing.com

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