



Laser scanners JEF3xx / JEF300 / Indoor / Short Range

JEF300-00000



Model Name > JEF300-00000
Part No. > 1056363



At a glance

- 2D and 3D fill level control
- Simple download of new configurations
- Multiple I/O and interfacing
- Cloning functions for parameters are available

Your benefits

- One sensor solution reduces setup costs
- Downloadable configuration options in the machine reduce setup time and save money
- No additional illumination needed



Features

Field of application:	Indoor
Version:	Short Range
Connection type:	Ethernet
Reading field:	Front
Light source:	Visible red light (650 nm)
MTBF:	40,000 h
Laser class:	2 (EN 60825-1 (A2:2001-03))
Field of view:	≤ 45 °
Scanning frequency:	600 Hz ... 700 Hz
Angular resolution:	1 °
Operating range:	0.4 m ... 2 m
Max. range with 10 % reflectivity:	1.2 m

Performance

Response time:	≥ 1.4 ms
Detectable object shape:	Almost any
Systematic error ¹⁾ :	± 25 mm
Statistical error ²⁾ :	± 25 mm
Integrated application:	Level Control

^{1) 2)} Typical value; actual value depends on environmental conditions.

Interfaces

Serial (RS-232, RS-422/485):	✓
Remark (Serial (RS-232, RS-422/485)):	AUX (only RS-232)
Function (Serial (RS-232, RS-422/485)):	Host, AUX
Data transmission rate (Serial (RS-232, RS-422/485)):	2,400 Baud ... 115 kBaud, AUX: 57.6 kBaud
Ethernet:	✓
Function (Ethernet):	Host, AUX
Data transmission rate (Ethernet):	10/100 Mbit
Protocol (Ethernet):	TCP/IP
CAN bus:	-
PROFIBUS DP:	-
PROFINET:	-
DeviceNet:	-
Switching inputs:	2
Switching outputs:	2
Optical indicators:	6 LEDs (Ready, laser, Data, CAN, LNK TX)
Memory card:	MicroSD memory card (flash card) 512 MB, optional
Connector:	Pivotable

Mechanics/electronics

Electrical connection:	2 M12 cylindrical connectors (17-pin plug, 4-pin socket) on swivel connector
Operating voltage:	18 V DC ... 30 V DC
Power consumption:	8.5 W
Housing:	Die-cast aluminum
Housing color:	Light blue (RAL 5012)
Enclosure rating:	IP 65 (EN 60529)
Protection class:	III (EN 61140)
Weight:	250 g
Dimensions:	61 mm x 96 mm x 38 mm ¹⁾

¹⁾ Swivel connector is 15 mm longer

Ambient data

Electromagnetic compatibility (EMC):	(EN 61000G6G2:2001) (EN 61000G6G4:2001)
Vibration resistance:	(EN 60068-2-6 (1995))
Shock resistance:	(EN 60068-2-27 (1993))
Ambient operating temperature:	0 °C ... 40 °C
Storage temperature:	-20 °C ... 70 °C
Ambient light safety:	2,000 lx
Permissible relative humidity:	± 90 %, non-condensing

General notes

Note on use:	Not suitable for personnel protection
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Technical drawing of the SICK IME 1200 sensor, showing three views: top, front, and side. Dimensions are given in mm.

Top View:

- Overall width: 65.2
- Overall depth: 13.7
- Blind hole tap M5, 5 deep (indicated by a 50° angle)
- Distance from left edge to center of first tap: 19.5
- Distance between center of first tap and center of second tap: 22.5
- Distance from right edge to center of second tap: 10
- Distance from right edge to center of third tap: 5.7

Front View:

- Overall width: 68
- Overall height: 96
- Blind hole tap M5, 5 deep (indicated by a 50° angle)
- Distance from top edge to center of first tap: 16
- Distance between center of first tap and center of second tap: 11
- Distance from bottom edge to center of second tap: 0.2
- Distance from bottom edge to center of third tap: 15
- Distance from bottom edge to center of fourth tap: 15
- Distance from bottom edge to center of fifth tap: 15
- Distance from bottom edge to center of sixth tap: 15
- Distance from bottom edge to center of seventh tap: 15
- Distance from bottom edge to center of eighth tap: 15
- Distance from bottom edge to center of ninth tap: 15
- Distance from bottom edge to center of tenth tap: 15
- Distance from bottom edge to center of eleventh tap: 15
- Distance from bottom edge to center of twelfth tap: 15
- Distance from bottom edge to center of thirteenth tap: 15
- Distance from bottom edge to center of fourteenth tap: 15
- Distance from bottom edge to center of fifteenth tap: 15
- Distance from bottom edge to center of sixteenth tap: 15
- Distance from bottom edge to center of seventeenth tap: 15
- Distance from bottom edge to center of eighteenth tap: 15
- Distance from bottom edge to center of nineteenth tap: 15
- Distance from bottom edge to center of twentieth tap: 15
- Distance from bottom edge to center of twenty-first tap: 15
- Distance from bottom edge to center of twenty-second tap: 15
- Distance from bottom edge to center of twenty-third tap: 15
- Distance from bottom edge to center of twenty-fourth tap: 15
- Distance from bottom edge to center of twenty-fifth tap: 15
- Distance from bottom edge to center of twenty-sixth tap: 15
- Distance from bottom edge to center of twenty-seventh tap: 15
- Distance from bottom edge to center of twenty-eighth tap: 15
- Distance from bottom edge to center of twenty-ninth tap: 15
- Distance from bottom edge to center of thirtieth tap: 15
- Distance from bottom edge to center of thirty-first tap: 15
- Distance from bottom edge to center of thirty-second tap: 15
- Distance from bottom edge to center of thirty-third tap: 15
- Distance from bottom edge to center of thirty-fourth tap: 15
- Distance from bottom edge to center of thirty-fifth tap: 15
- Distance from bottom edge to center of thirty-sixth tap: 15
- Distance from bottom edge to center of thirty-seventh tap: 15
- Distance from bottom edge to center of thirty-eighth tap: 15
- Distance from bottom edge to center of thirty-ninth tap: 15
- Distance from bottom edge to center of fortieth tap: 15
- Distance from bottom edge to center of forty-first tap: 15
- Distance from bottom edge to center of forty-second tap: 15
- Distance from bottom edge to center of forty-third tap: 15
- Distance from bottom edge to center of forty-fourth tap: 15
- Distance from bottom edge to center of forty-fifth tap: 15
- Distance from bottom edge to center of forty-sixth tap: 15
- Distance from bottom edge to center of forty-seventh tap: 15
- Distance from bottom edge to center of forty-eighth tap: 15
- Distance from bottom edge to center of forty-ninth tap: 15
- Distance from bottom edge to center of fiftieth tap: 15
- Distance from bottom edge to center of fifty-first tap: 15
- Distance from bottom edge to center of fifty-second tap: 15
- Distance from bottom edge to center of fifty-third tap: 15
- Distance from bottom edge to center of fifty-fourth tap: 15
- Distance from bottom edge to center of fifty-fifth tap: 15
- Distance from bottom edge to center of fifty-sixth tap: 15
- Distance from bottom edge to center of fifty-seventh tap: 15
- Distance from bottom edge to center of fifty-eighth tap: 15
- Distance from bottom edge to center of fifty-ninth tap: 15
- Distance from bottom edge to center of sixtieth tap: 15
- Distance from bottom edge to center of sixty-first tap: 15
- Distance from bottom edge to center of sixty-second tap: 15
- Distance from bottom edge to center of sixty-third tap: 15
- Distance from bottom edge to center of sixty-fourth tap: 15
- Distance from bottom edge to center of sixty-fifth tap: 15
- Distance from bottom edge to center of sixty-sixth tap: 15
- Distance from bottom edge to center of sixty-seventh tap: 15
- Distance from bottom edge to center of sixty-eighth tap: 15
- Distance from bottom edge to center of sixty-ninth tap: 15
- Distance from bottom edge to center of seventieth tap: 15
- Distance from bottom edge to center of seventy-first tap: 15
- Distance from bottom edge to center of seventy-second tap: 15
- Distance from bottom edge to center of seventy-third tap: 15
- Distance from bottom edge to center of seventy-fourth tap: 15
- Distance from bottom edge to center of seventy-fifth tap: 15
- Distance from bottom edge to center of seventy-sixth tap: 15
- Distance from bottom edge to center of seventy-seventh tap: 15
- Distance from bottom edge to center of seventy-eighth tap: 15
- Distance from bottom edge to center of seventy-ninth tap: 15
- Distance from bottom edge to center of eightieth tap: 15
- Distance from bottom edge to center of eighty-first tap: 15
- Distance from bottom edge to center of eighty-second tap: 15
- Distance from bottom edge to center of eighty-third tap: 15
- Distance from bottom edge to center of eighty-fourth tap: 15
- Distance from bottom edge to center of eighty-fifth tap: 15
- Distance from bottom edge to center of eighty-sixth tap: 15
- Distance from bottom edge to center of eighty-seventh tap: 15
- Distance from bottom edge to center of eighty-eighth tap: 15
- Distance from bottom edge to center of eighty-ninth tap: 15
- Distance from bottom edge to center of ninetieth tap: 15
- Distance from bottom edge to center of ninety-first tap: 15
- Distance from bottom edge to center of ninety-second tap: 15
- Distance from bottom edge to center of ninety-third tap: 15
- Distance from bottom edge to center of ninety-fourth tap: 15
- Distance from bottom edge to center of ninety-fifth tap: 15
- Distance from bottom edge to center of ninety-sixth tap: 15
- Distance from bottom edge to center of ninety-seventh tap: 15
- Distance from bottom edge to center of ninety-eighth tap: 15
- Distance from bottom edge to center of ninety-ninth tap: 15
- Distance from bottom edge to center of one hundredth tap: 15

Side View:

- Overall width: 43.7
- Overall height: 41.7
- Blind hole tap M5, 5 deep (indicated by a 50° angle)
- Distance from left edge to center of first tap: 19.5
- Distance between center of first tap and center of second tap: 22.5
- Distance from right edge to center of second tap: 10
- Distance from right edge to center of third tap: 5.7

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