



V3T13P-MR62A7S50

TriSpectorP1000

3D MACHINE VISION

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
V3T13P-MR62A7S50	1106181

Other models and accessories → www.sick.com/TriSpectorP1000



Detailed technical data

Features

Task	Quality inspection Measuring, 3D Robot guidance
Technology	3D line scanning
Product category	Programmable
Toolkit	SICK algorithm API HALCON 3D Belt Pick SensorApp
Working distance	291 mm ... 1,091 mm
Example field of view	540 mm x 200 mm
Illumination	Integrated
Illumination color	Red, laser, Visible, 660 nm, ± 7 nm
Laser class	2 (IEC 60825-1:2014, EN 60825-1:2014)
Factory calibrated	✓
Width at minimum operating distance	180 mm
Width at maximum operating distance	660 mm
Maximum height range	800 mm
Imaging angle	67°
Offline support	Emulator

Mechanics/electronics

Connection type	M12, 12-pin male connector, A-coded (voltage supply, I/O) M12, 8-pin female connector, X-coded (Gigabit Ethernet) M12, 8-pin female connector, A-coded (encoder)
Connector material	Nickel plated brass
Supply voltage	24 V, ± 20 %
Ripple	< 5 V _{pp}

Power consumption	≤ 11 W
Current consumption	< 400 mA, without output load
Enclosure rating	IP67
Protection class	III
Housing material	Anodized aluminum
Window material	Glass
Weight	1.7 kg
Dimensions (L x W x H)	307 mm x 62 mm x 84 mm

Performance

Scan/frame rate	5,000 3D profiles/s
Maximum number of profiles	2,500 Per image
Height resolution	80 µm ... 670 µm
3D profile resolution	0.43 mm/px

Interfaces

Ethernet	✓, TCP/IP
Function	FTP, HTTP
Data transmission rate	≤ 1,000 Mbit/s
Serial	✓, RS-232, RS-422
Operator interfaces	Web server
Configuration software	SICK AppStudio
Digital input	3 inputs
Configurable outputs	4 inputs/outputs
Encoder interface	RS-422 / TTL
Maximum encoder frequency	300 kHz

Ambient data

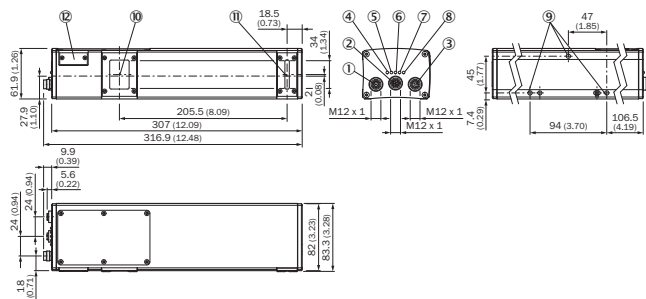
Electromagnetic compatibility (EMC)	EN 61000-6-2:2005 / EN 61000-6-3:2007
Shock load	15 g / 6 ms (EN 60068-2-27)
Vibration load	5 g, 10 Hz ... 150 Hz (EN 60068-2-6)
Ambient operating temperature	0 °C ... +50 °C
Storage temperature	-20 °C ... +70 °C

Classifications

ECl@ss 5.0	27310205
ECl@ss 5.1.4	27310205
ECl@ss 6.0	27310205
ECl@ss 6.2	27310205
ECl@ss 7.0	27310205
ECl@ss 8.0	27310205
ECl@ss 8.1	27310205
ECl@ss 9.0	27310205
ECl@ss 10.0	27310205
ECl@ss 11.0	27310205

ECI@ss 12.0	27310205
ETIM 5.0	EC001820
ETIM 6.0	EC001820
ETIM 7.0	EC001820
ETIM 8.0	EC001820
UNSPSC 16.0901	43211731

Dimensional drawing (Dimensions in mm (inch))

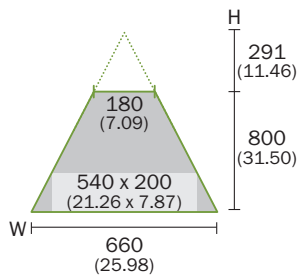


- ① Connector Encoder (thread inside)
- ② Connector Gigabit Ethernet (Gig E)
- ③ Connector Power I/O (thread inside)
- ④ LED; On
- ⑤ LED; State
- ⑥ LED; Link/Data
- ⑦ LED; Result
- ⑧ LED; Laser
- ⑨ Fastening threads (M5 x 8.5 mm length)
- ⑩ Optical receiver (center)
- ⑪ Optical sender (center)
- ⑫ Micro SD memory card

Field of view

TriSpectorP1060

Typ. field of view in mm (inch)

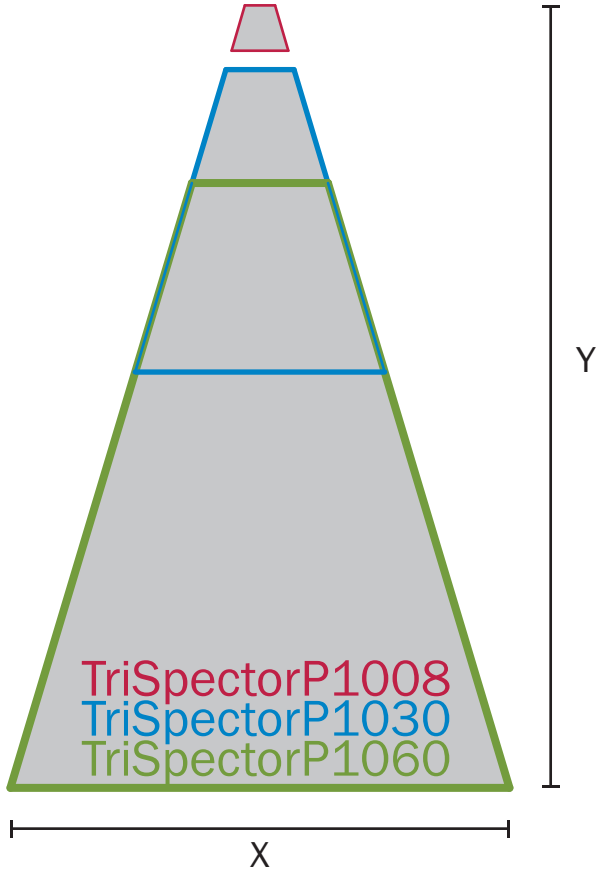


Typical field of view

TriSpectorP1000



Y = Max. height range
X = Width at max.
working distance





Overview

SICK AppSpace



Recommended accessories

Other models and accessories → www.sick.com/TriSpectorP1000

	Brief description	Type	Part no.
Sets and kits			
	3D belt pick accessory set with 5 m power I/O cable, 5 m gigabit Ethernet cable, 5 m sensor/actuator cable, encoder terminal and mounting bracket for TriSpectorP1000	3D belt pick accessory set	1103512
Incremental encoders			
	<ul style="list-style-type: none"> Mechanical design: Solid shaft face mount flange 10 mm x 19 mm Communication interface: 4.5 V ... 32 V, TTL, HTL, programmable Connection type: Male connector, M12, 8-pin, radial Pulses per revolution: 10,000 	DFS60B-S4PC10000	1036721

Recommended services

Additional services → www.sick.com/TriSpectorP1000

	Type	Part no.
Warranty extensions		
<ul style="list-style-type: none"> • Product area: Identification solutions, machine vision, Distance sensors, Detection and ranging solutions • Range of services: The services correspond to the scope of the statutory manufacturer warranty (SICK general terms and conditions of purchase) • Duration: Five-year warranty from delivery date. 	Extended warranty for a total of five years from delivery date	1680671
Feasibility study		
<ul style="list-style-type: none"> • Product area: 2D machine vision, 3D machine vision • Range of services: Recommendations based on tests at SICK, description of the field of application, consideration of specifications of SICK products, identification of performance factors, temporary analysis of influencing factors, acceptance tests, adjustments to application-specific parameters, test scans for initial verification at SICK, documentation and archiving • Documentation: Description of the application, suggestion for a solution, proof of concept, mounting instructions, results and summary • Duration: Additional work will be invoiced separately • Travel expenses: The prices do not include expenses or costs for the travel time, travel costs, such as flight or hotel expenses, are not included 	Vision Gold feasibility study	1612805

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com