V3T12P-MR32A8S50

TriSpectorP1000

3D MACHINE VISION

SICK
Sensor Intelligence.

V3T12P-MR32A8S50 | TriSpectorP1000

3D MACHINE VISION

Ordering information

Type	Part no.
V3T12P-MR32A8S50	1106180

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

Detailed technical data

Features

Task	Detecting - Standard objects Detecting - Level Measuring - Dimension, contour and volume Measuring - Number Monitoring and controlling - Quality Determining position - 3D position determination
Technology	3D triangulation
Product category	Programmable
Toolkit	SICK algorithm API HALCON 3D Belt Pick SensorApp
Working distance	141 mm … 541 mm
Example field of view	270 mm x 100 mm
Illumination	Integrated
Illumination color	Red, laser, Visible, 660 nm, ± 7 nm
Laser class	2 (EN 60825-1:2014+A11:2021; IEC 60825-1:2014, Complies with the FDA performance requirements for laser products except for conformance with IEC 60825-1 Ed.3., as described in Laser Notice 56 dated May 8, 2019.)
Factory calibrated	✓
Width at minimum operating distance	90 mm
Width at maximum operating distance	330 mm
Maximum height range	400 mm
Imaging angle	65°
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	PMMA
Weight	1.3 kg
Dimensions (L x W x H)	217 mm x 62 mm x 84 mm

Performance

Scan/frame rate	5,000 3D profiles/s
Maximum number of profiles	2,500 Per image
Data points/profile	1,536
Height resolution	40 µm … 280 µm
3D profile resolution	0.215 mm/px

Interfaces

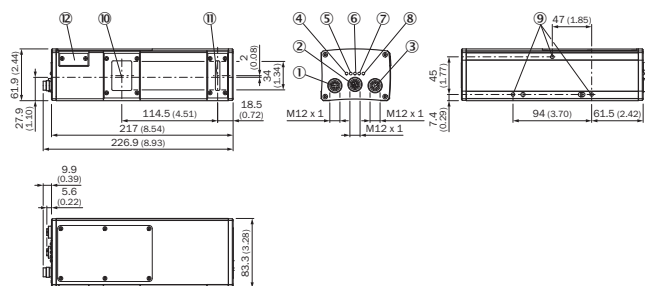|		
Ethernet		✓, TCP/IP
	Function	FTP, HTTP
	Data transmission rate	≤ 1,000 Mbit/s
Serial		✓, RS-232, RS-422
Operator interfaces		Web server
Configuration software		SICK AppStudio
Digital input		3 inputs
Configurable outputs		4 inputs/outputs
Encoder interface		RS-422 / TTL
Maximum encoder frequency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

ECLASS 5.0	27310205
ECLASS 5.1.4	27310205
ECLASS 6.0	27310205
ECLASS 6.2	27310205
ECLASS 7.0	27310205
ECLASS 8.0	27310205

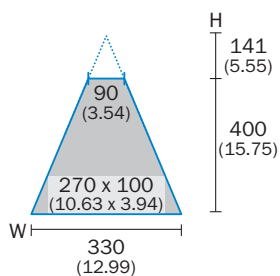| ECLASS 8.1	27310205
ECLASS 9.0	27310205
ECLASS 10.0	27310205
ECLASS 11.0	27310205
ECLASS 12.0	27310205
ETIM 5.0	EC001820
ETIM 6.0	EC001820
ETIM 7.0	EC001820
ETIM 8.0	EC001820
UNSPSC 16.0901	43211731

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
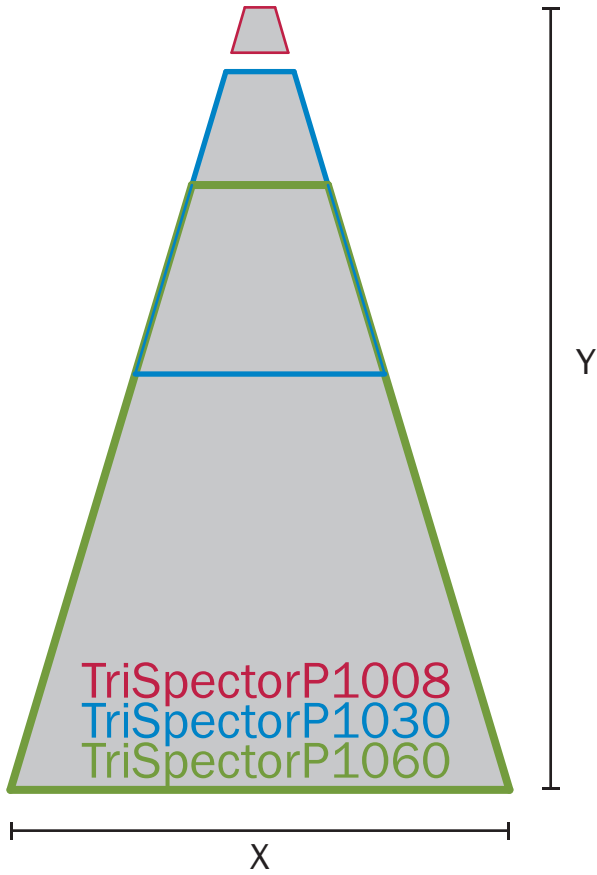
TriSpectorP1030
Typ. field of view in mm (inch)

Typical field of view
TriSpectorP1000

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

Y

TriSpectorP1008
TriSpectorP1030
TriSpectorP1060

X

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		
• **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.
Extended warranty		
• **Product area:** Machine vision, LiDAR sensors, safety camera sensors, Safety laser scanners, Safety radar sensors, Radar sensors, Fixed mount barcode scanners, Image-based code readers, RFID, Mobile handheld scanners • **Range of services:** The services correspond to the scope of the statutory manufacturer warranty (SICK general terms of delivery). • **Duration:** Five-year warranty from delivery date.	Extended warranty for a total of five years from delivery date	1680671

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."

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