



Laser scanners  
NAV / NAV350 / Indoor / Long Range

NAV350-3232



**Model Name** > [NAV350-3232](#)  
**Part No.** > [1052928](#)

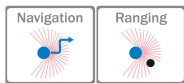


#### At a glance

- Mixed-mode navigation provides both spatial contour data and reflector data
- Long scanning range: up to 70 m on reflectors (up to 35 m on black targets)
- High internal computing power and individual AGV configuration
- Measurement, navigation, and determination of position with highest level of precision from three visible reflectors
- Angular resolution of up to 0.1 degrees
- Navigation, spatial and contour data, reflector marks, angular position and/or raw data collection

#### Your benefits

- Precise, fast collection of spatial contour data and/or simultaneous determination of reflector data (managing up to 12,000 reflectors) in real time
- Integrated evaluation of measured data reduces the computing load in the vehicle computer, minimizing power consumption and reducing operating costs
- High flexibility, since line guidance is also possible in areas without reflector marks, and routes can be easily modified using teach-in mode
- Accurate measurements in harsh industrial environments thanks to IP 65 housing
- High angular resolution for gap-free scanning even under difficult conditions
- Hardware synchronization output ensures precise control



#### Features

Field of application:	Indoor
Version:	Long Range
Light source:	905 nm
Laser class:	1, eye-safe
Field of view:	360 °
Scanning frequency:	8 Hz, ± 5 %
Angular resolution:	0.25 °
Operating range:	0.5 m ... 250 m (0.5 m ... 70 m on reflectors)
Max. range with 10 % reflectivity:	35 m

## Performance

---

Detectable object shape:	Almost any
Systematic error <sup>1)</sup> ; <sup>2)</sup> :	± 10 mm (RDI) ± 15 mm (Contour)
Statistical error <sup>3)</sup> :	15 mm (Contour)
Integrated application:	Navigation
Reflector memory:	12,000
Positioning accuracy:	± 4 mm

1) 2) 3) Typical value; actual value depends on environmental conditions.

## Interfaces

---

Serial (RS-232):	✓
Data transmission rate (Serial (RS-232)):	19.2 kBaud ... 115 kBaud
Ethernet:	✓
Data transmission rate (Ethernet):	100 Mbit/s
Protocol (Ethernet):	TCP/IP
CAN bus:	-
Switching outputs:	1 (digital)
Optical indicators:	4 LEDs (status displays)

## Mechanics/electronics

---

Electrical connection:	3 x M12 male connector/female connector
Operating voltage:	24 V DC± 15 %
Power consumption:	36 W
Housing:	Die-cast aluminum
Housing color:	Light blue (RAL 5012)
Enclosure rating:	IP 65
Protection class:	III
Weight:	2.4 kg
Dimensions:	115 mm x 120.5 mm x 222 mm

## Ambient data

---

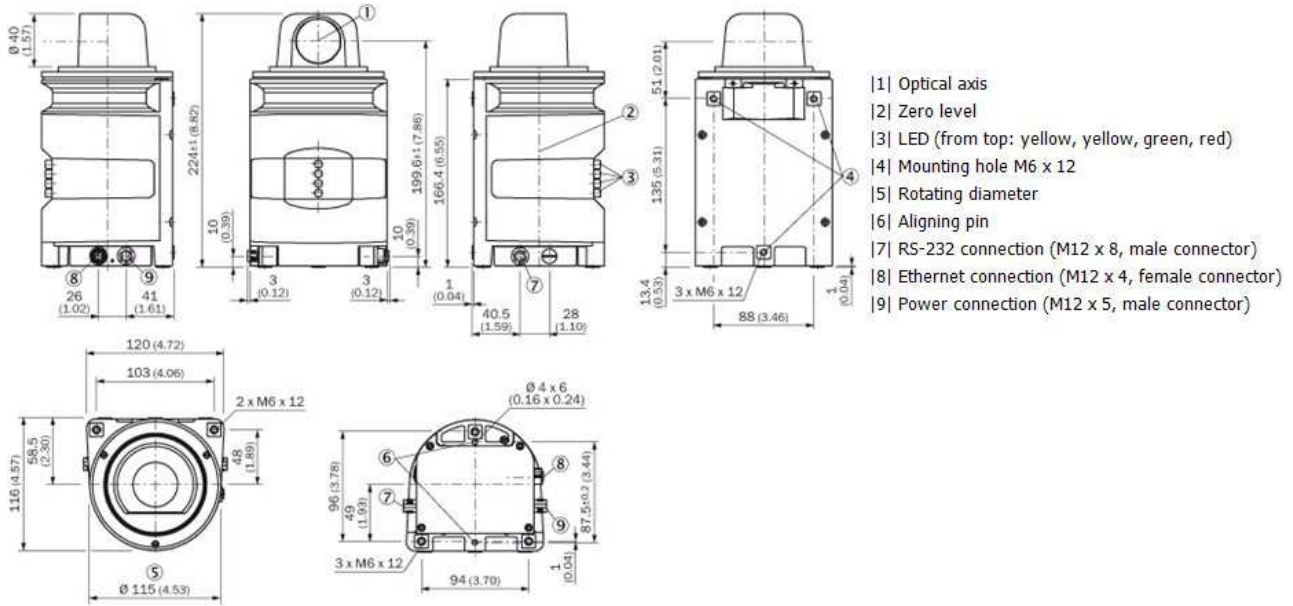
Ambient operating temperature:	0 °C ... +50 °C
Storage temperature:	-20 °C ... +80 °C
Permissible relative humidity:	85 %, non-condensing
Reflector marks (recommended):	Stripes: width ≥ 80 mm, Cylindrical: diameter ≥ 80 mm

## General notes

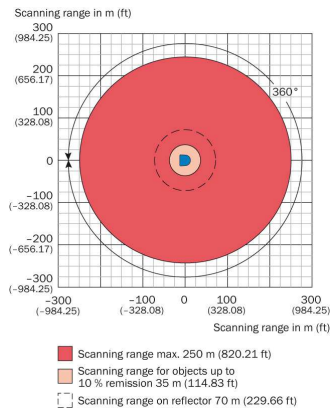
---

Note on use:	Not suitable for personnel protection
--------------	---------------------------------------

## Dimensional drawing



## Operating range diagram



**Australia**

Phone +61 3 9457 0600  
1800 33 48 02 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail marketing@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Česká republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail info@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6881000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 5309 2112  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederland**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail sick@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail sales.gsg@sick.com

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886 2 2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 88 65 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 (800) 325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)