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PRODUCT OVERVIEW

Dx80

Laser distance sensors

SICK Sensor Intelligence



TIME-OF-FLIGHT SENSORS

Dx80

Optical distance sensors for reliable measurements on natural objects up to 80 m

The Dx80 laser distance sensor combines a large measuring range with high measurement accuracy – all in a compact housing. The modern sensor with advanced materials and technologies enables high performance: with a scanning range of up to 80 m, it offers a measurement accuracy of ± 2 mm. This makes the sensor the ideal solution for demanding applications – whether in manufacturing, machine building or mobile systems.
With an integrated IO-Link interface or future-oriented Ethernet communication, the Dx80 can be flexibly integrated into a variety of automation environments.

Dx80 AT A GLANCE

BENEFITS

- Accurate measurements to increase process quality and save valuable resources
- Large measuring range to meet the requirements of a variety of applications
- Flexible system integration and access to sensor data via IO-Link or Ethernet interface with cloud connectivity via MQTT
- Effortless parameterization and visualization via SOPAS ET or web server
- Easy commissioning and intuitive operating experience thanks to the symbol supported color display
- Compact and rugged metal housing for uncomplicated integration even in tight installation spaces

FEATURES

- Measurement accuracy of +/- 2 mm, repeatability ≥ 0.2 mm
- Measuring ranges from 0.05 m to 80 m on white and up to 14 m on black
- IO-Link V1.1 or Ethernet interface and MQTT with analog and digital output
- Intuitive configuration via SOPAS ET or integrated web server
- User-friendly TFT color display
- Proven metal housing

TECHNICAL DATA OVERVIEW

Measuring range	50 mm ... 80,000 mm
Laser class	2
Communication interface	Ethernet IO-Link
Connection type	Cable with plug M12, 5-pin
Housing material	Metal

ADVANTAGES



Strong through a precise approach

In production processes, accurate distance measurement is crucial for ensuring a consistent product quality and avoiding downtime.



Higher efficiency
A large number of manual calibrations are no longer necessary thanks to the precise control of the production processes.



Better quality
The high repeatability makes fully automated motion sequences possible without readjustment.



Sustainability and resource efficiency
Minor deviations reduce the need to repeat tasks and reduce the use of resources.

→ Don't settle for a generic distance sensor – experience the difference!

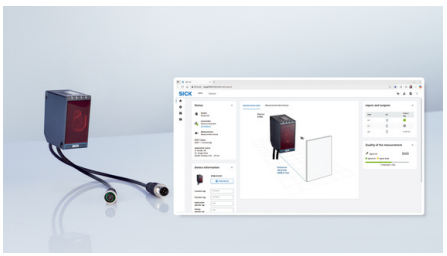


Seamless system integration with IO-Link or Ethernet

Onboard IO-Link or Ethernet connectivity with TCP/IP combined with the future-oriented MQTT protocol enables seamless integration into industrial PLC and PC systems.
The sensor streams process data via TCP/IP or IO-Link and simultaneously outputs an analog output signal. The various data transmission options make the Dx80 distance sensor the ideal solution for smart factories and Industry 4.0 applications.



From the sensor to the cloud
The transmission of sensor data via the MQTT protocol ensures an efficient cloud connectivity. Location-independent access to data opens up far-reaching possibilities for condition monitoring and predictive maintenance.



Visualization and configuration via the integrated web server
SOPASair enables efficient parameterization, configuration and diagnostics directly via the web browser in a modern and user-friendly interface. The browser display eliminates the need to install software. The application is independent of the operating system.



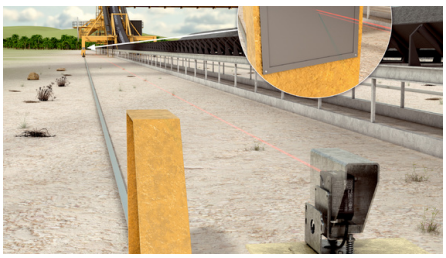
Easy commissioning, integration and maintenance via IO-Link
Smart Sensors with IO-Link generate and receive data as well as information that goes beyond conventional switching signals or measured process parameters.
The quick replacement of the device keeps production interruptions to a minimum and machine availability to a high level. With SICK ConnectX, the sensor data from the Dx80 can be actively integrated into IT systems, for example via MQTT.

→ Next generation sensors – reliable and networked for the long term.

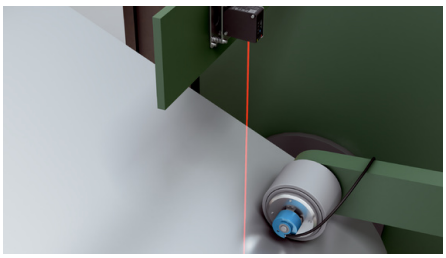


Countless possibilities

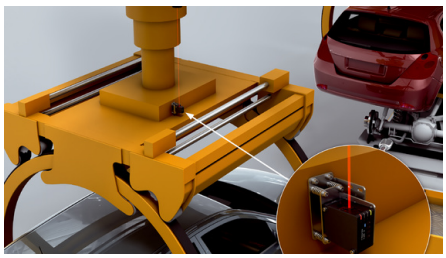
The versatile and durable Dx80 laser distance sensor can be used in numerous applications. The rugged metal housing and high IP enclosure rating contribute to reliable operation in harsh environments – even with severe temperature fluctuations and intense sunlight.



Outdoor automation
Precision movements, even in demanding environments.



Machines
Achieve high efficiency in your production processes thanks to precise and stable measurement results.



Automotive
The Dx80 reliably performs positioning tasks in vehicle manufacturing, whether it be vehicles with a conventional combustion engine or alternative drive technology.

→ Meeting the challenge: Rely on rugged solutions.

Select the right product variant and accessories directly online. There you will also find example applications as well as downloads such as CAD dimensional models, operating instructions and software.
www.sick.com/Dx80

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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnership with our customers is more than just a promise: Together, we optimize productivity, elevate quality, protect health and safety, and sustain the future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions.

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