



VISIC620

MEASUREMENT OF VISUAL RANGE FOR
ROADS, TUNNELS AND SEA ROUTES

Visual range measuring devices

SICK
Sensor Intelligence.

VISIC620 WILL NOT LEAVE YOU ALONE IN THE FOG

Fog on the road presents a significant danger to drivers and is often underestimated. The VISIC620 visual range measuring device from SICK helps to prevent pileups in fog. Depending on the measured visual range, the maximum allowed speed is specified on variable message signs.

Fog Measurement

Fast measuring cycles and an innovative optical principle of the visual range measuring device VISIC620 reduce the influence of humidity on the measuring results to a minimum. The automatic self-test measures the contamination of the front screen and recognizes objects such as leaves in the beam path. Retrofitting of the VISIC620 with a precipitation detector is optionally available. A brightness measurement for day-night distinction is additionally possible via a digital interface.

Plug & Play On-site

The VISIC620 offers minimum space requirement, low weight and integrated fixtures. It is also prepared for the installation at any optional position for example on a mast or level as well as on a vertical wall. So the VISIC620 is favorable when not much space is available – with unaffected measuring results by other devices or even shiny metallic parts. And finally plug & play through sturdy plug-in connector and very simple parameter setting.

Economic Operation

The VISIC620 requires very little maintenance – only every 5 years (apart from cleaning). Other inspections on site or conveniently via serial interface are useful. Effective mechanic screens protect the front windows from fast contamination. The need for cleaning is automatically signaled by the fog sensor.



Traffic management systems



Light houses

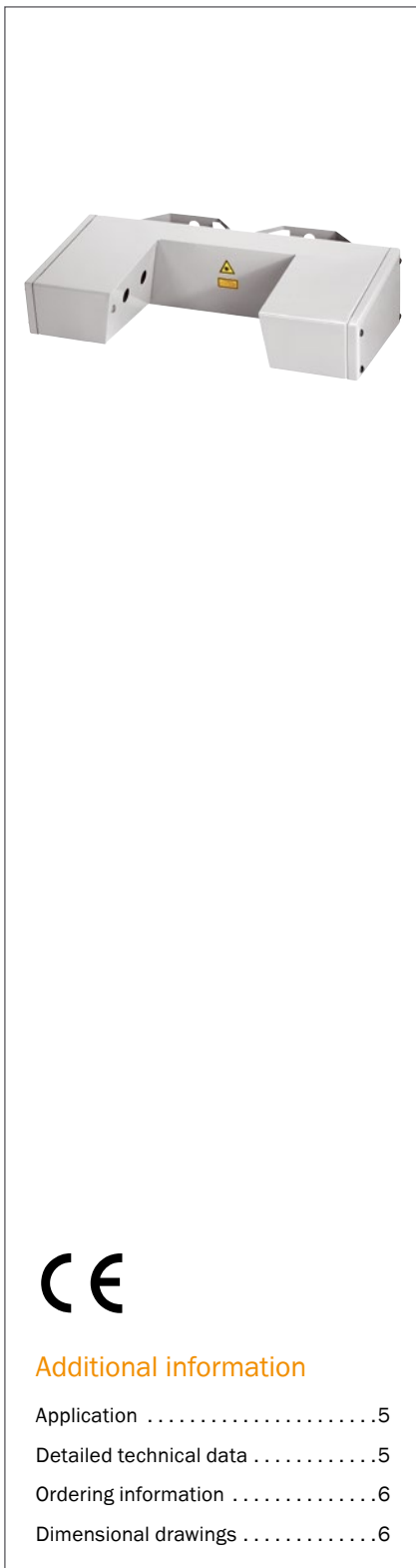


Automatic weather stations (meteorology)



- ① **Stainless steel housing**
1.4571, powder coated
- ② **Quick-release**
for easy access when cleaning the front window
- ③ **Protective plate**
for efficient dirt deflection
- ④ **Test channel**
for function and soiling measurement
- ⑤ **Measuring channel**
- ⑥ **Laser class 2 eye safety**
- ⑦ **Attachment**
for mast diameters: 50 ... 110 mm
- ⑧ **Captive stainless steel screws**
- ⑨ **All front windows heated**

MEASUREMENT OF VISUAL RANGE FOR ROADS, TUNNELS AND SEA ROUTES



Product description

The VISIC620 determines the visual range on roads, sea routes or in weather observation stations or measures the visibility (as k-value or in mg/m³) in tunnels. An automatic self-test measures and compensates for possible front screen soiling. Furthermore, it reliably recognizes objects such as leaves or

plants in the optical path. Therefore, the VISIC620 can measure fog reliably. The long maintenance interval of five years (except cleaning), the robust enclosure made of stainless steel and the possibility of power supply via solar panel or battery make the VISIC620 a real outdoor product, also in salty air.

At a glance

- Large measuring range for visual range
- Precipitation detector as an option
- Contamination check
- Minimum space requirements and low weight
- Self-sufficient design possible with solar panel and battery
- Rugged housing, also for salty air

Your benefits

- Reliable measured values
- Low operational costs
- Low maintenance requirements due to long maintenance intervals



Additional information

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→ www.mysick.com/en/VISIC620

For more information, just enter the link and get direct access to technical data, CAD design models, operating instructions, software, application examples and much more.

Application

- Determination of the visual range on roads
- Measurement of visibility or dust concentration in tunnels
- Detection of smoke in tunnels
- Fog detection on coasts and sea routes
- Detection of fog and precipitation in weather stations

Detailed technical data

The exact device specifications and performance data of the product may deviate from the information provided here, and depend on the application in which the product is being used and the relevant customer specifications.

VISIC620 system

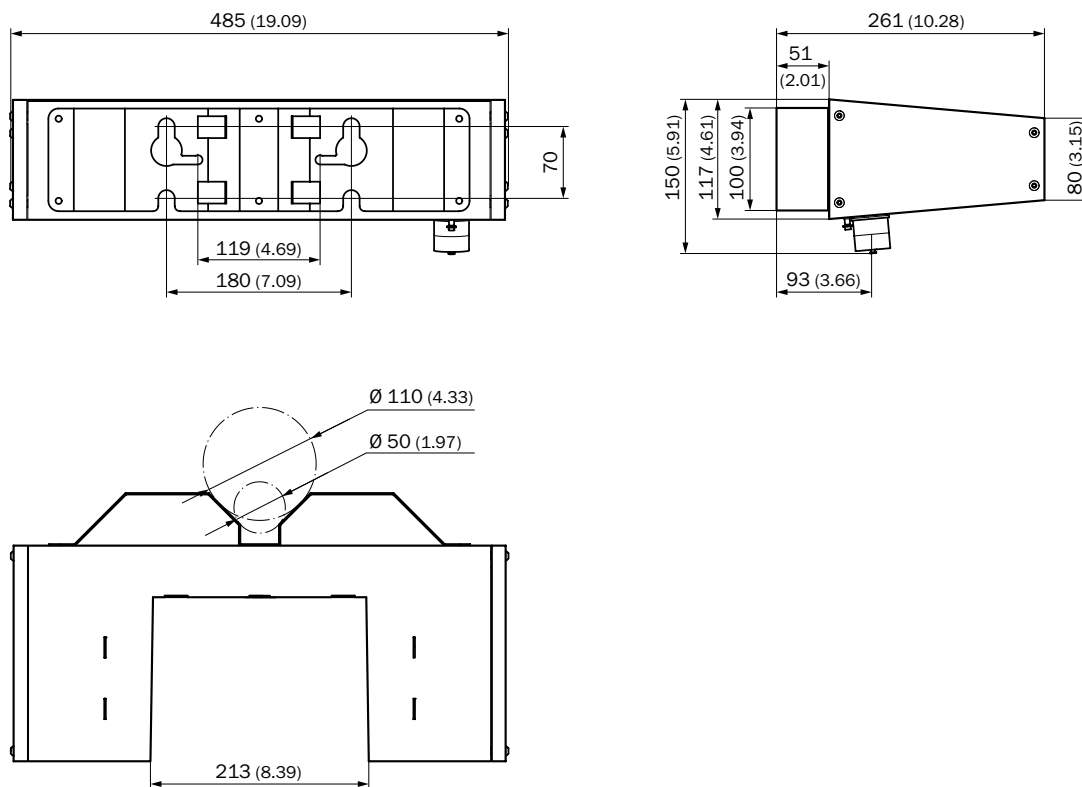
Measured values	Standard visual range
Maximum number of measurands	1
Measurement principles	Scattered light forward
Spectral range	640 nm ... 660 nm Laser, protection class 2, power < 1 mW
Measuring ranges	Standard visual range 10 ... 500 m / 10 ... 16,000 m Output range freely adjustable
Response time	2 s ... 300 s
Accuracy	± 5 m For visual range below 50 m ± 10 % Of measured value for visual range below 5,000 m ± 20 % Of measured value for visual range below 16,000 m
Repeatability	± 2 % for a visual range of 200 m
Ambient temperature	-30 °C ... +55 °C
Storage temperature	-40 °C ... +75 °C
Ambient humidity	0 % ... 100 %
Electrical safety	CE
Enclosure rating	IP 69K
Analog outputs	1 output: 0 ... 20 mA Only VISIC620-1xxxx
Digital outputs	2 relay contacts: 48 V AC, 35 W / 48 V DC, 24 W Only VISIC620-1xxxx
Digital inputs	1 floating contact: 4 V, 4.5 mA Not for VISIC620-1xxxx
Interfaces	RS-232 (service interface) RS-485 (only VISIC620-2xxxx) Modem (only VISIC620-14xxx, VISIC620-42xxx and VISIC620-43xxx)
Bus protocol	CAN (only VISIC620-3xxxx)
Dimensions (W x H x D)	479 mm x 117 mm x 261 mm (for details see dimensional drawings)
Weight	5.6 kg
Material	Stainless steel 1.4571, powder-coated
Electrical connection	
	Voltage 24
	Power consumption ≤ 10 W
Test functions	Automatic self-test (contamination, drift, LED, disturbing objects)

Ordering information

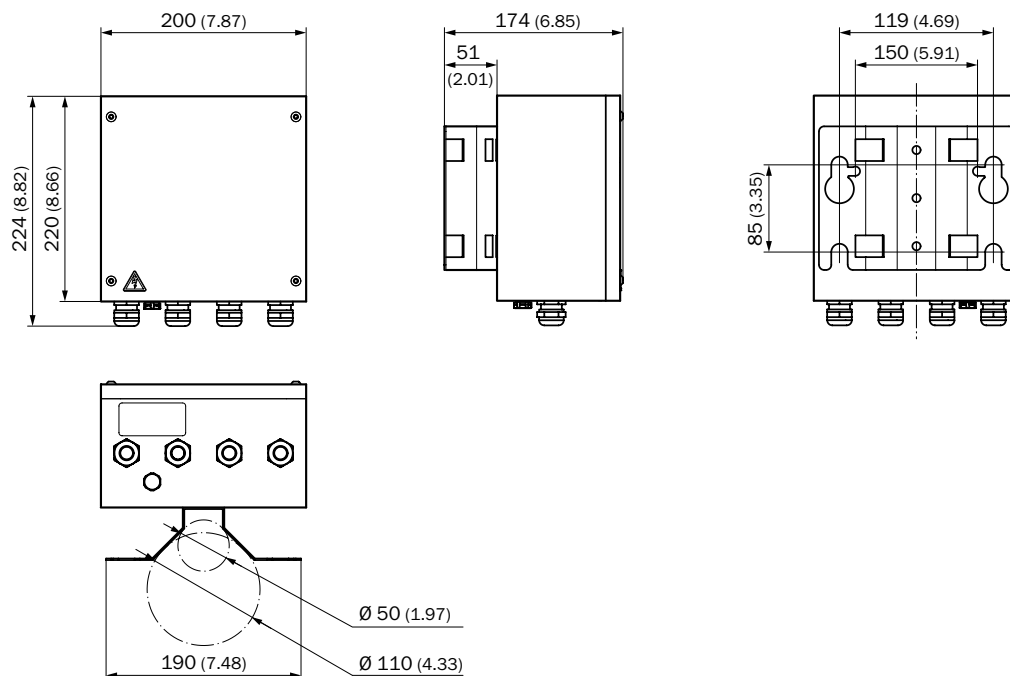
Our regional sales organization will help you to select the optimum device configuration.

Dimensional drawings (Dimensions in mm (inch))

VISIC620 measuring unit

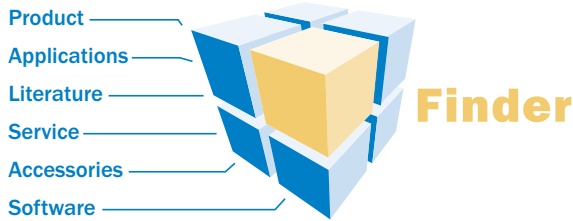


VISIC620 connection unit



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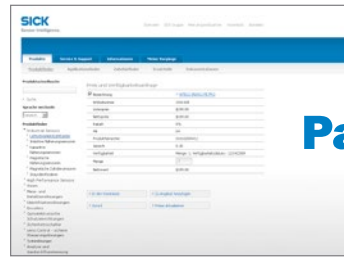


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Training & Education

Employee qualification for increased competitiveness

SICK AT A GLANCE

SICK is a leading manufacturer of intelligent sensors and sensor solutions for factory, logistics, and process automation. With more than 6,000 employees and over 40 subsidiaries worldwide, we are always close to our customers. 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 various 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 round out 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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