Product data sheet



VISIC50SF-0000

VISIC50SF

SMOKE DETECTORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
VISIC50SF-0000	1068730

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

Other models and accessories ➜ www.sick.com/VISIC50SF

Detailed technical data

Technical specifications

Description	Smoke detector for early fire detection in tunnels
Measured values	Visibility (K-value)
Measurement principles	Scattered light forward
Measuring ranges	
Visibility (K-value)	0 ... 150 km^{-1}
Temperature measurement (option)	–30 ... +70 °C
Response time (t_{90})	≤ 5 s
Resolution	
Visibility (K-value)	1 km^{-1}
Repeatability	
Visibility (K-value)	≤ 1 %
Ambient temperature	–20 °C ... +55 °C
Storage temperature	–30 °C ... +85 °C
Ambient pressure	860 hPa ... 1,080 hPa
Ambient humidity	10 % ... 100 % Relative humidity; non-condensing
Conformities	ASTRA "Guideline - Ventilation of Road Tunnels" (2008) RABT 2006
Electrical safety	CE
Enclosure rating	IP6K9K
Analog outputs	2 outputs: 4 ... 20 mA, 500 Ω Electrically isolated; short-circuit proof. Outputs are preset for smoke detection and temperature.
Digital outputs	3 relay contacts: 48 V, 0.5 mA, 24 W Preset for failure, limit value and maintenance

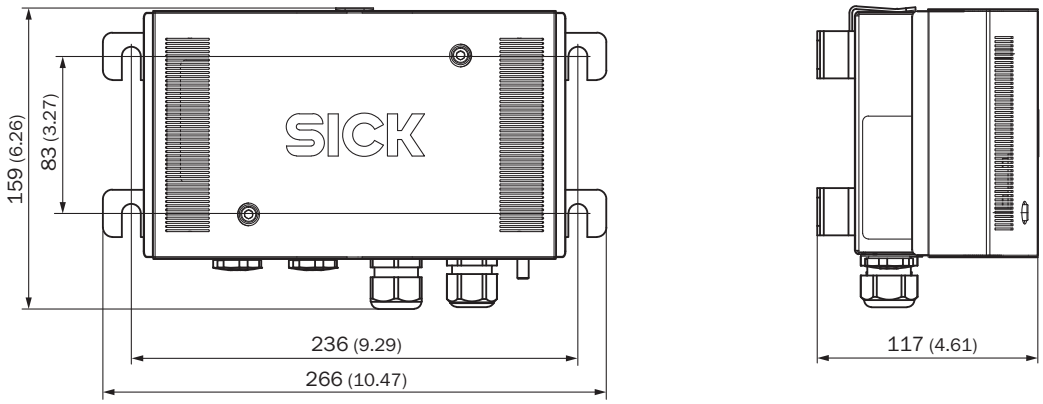
Modbus	✓
Remark	Not available when a TAD is used
Type of fieldbus integration	RTU RS-485
Indication	
	LC display, inside
	Status LEDs: “Operational”, “Maintenance required”, and “Fault”
Input	Functional keys
Operation	Via LC-display and function keys
Dimensions (W x H x D)	
	266 mm x 159 mm x 117 mm (for details see dimensional drawings)
Weight	
	≤ 2.8 kg
Material	Stainless steel 1.4571
Mounting	Wall mount, vertical, wall inclination up to 45° or ceiling mount using an adapter
Energy supply	
Voltage	18 V DC ... 28 V DC, ± 10 %
	Other voltages with optional connecting unit or TAD control unit
Current consumption	≤ 1 A
Power consumption	Without heating: ≤ 5 W With heating: ≤ 20 W
Test functions	Contamination monitoring of glass pane Drift and plausibility check Automatic self-test
Options	Temperature sensor TAD control unit Connection unit

Classifications

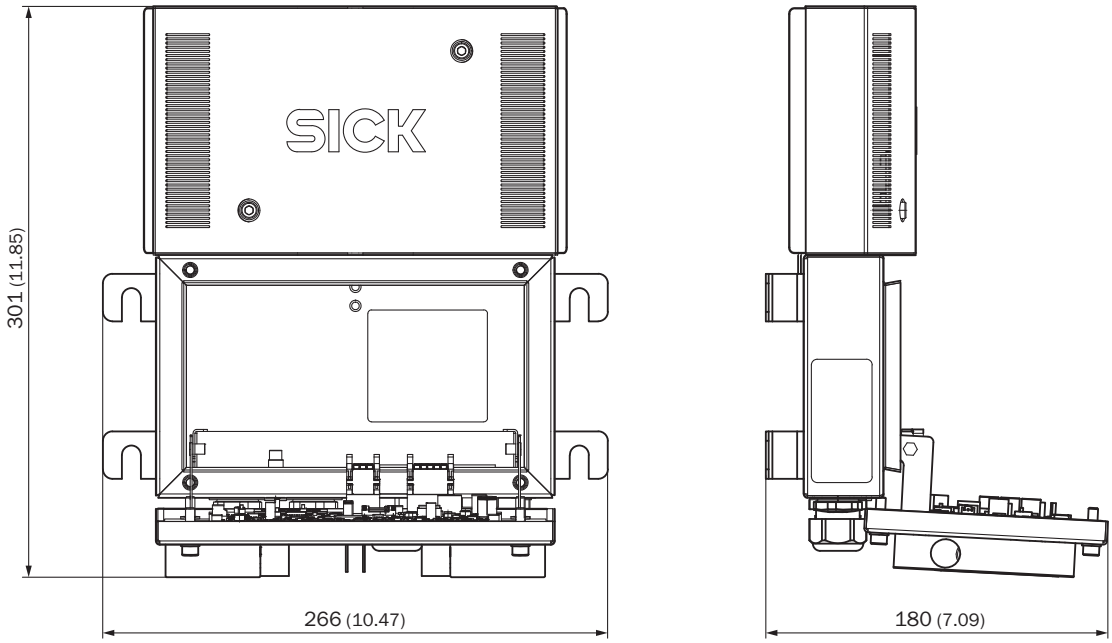
ECLASS 5.0	27150305
ECLASS 5.1.4	27150305
ECLASS 6.0	27150305
ECLASS 6.2	27150305
ECLASS 7.0	27150305
ECLASS 8.0	27150305
ECLASS 8.1	27150305
ECLASS 9.0	27150305
ECLASS 10.0	27150305
ECLASS 11.0	27150305
ECLASS 12.0	27150305
ETIM 5.0	EC001190
ETIM 6.0	EC001190
ETIM 7.0	EC001190
ETIM 8.0	EC001190
UNSPSC 16.0901	41115406

Dimensional drawing (Dimensions in mm (inch))

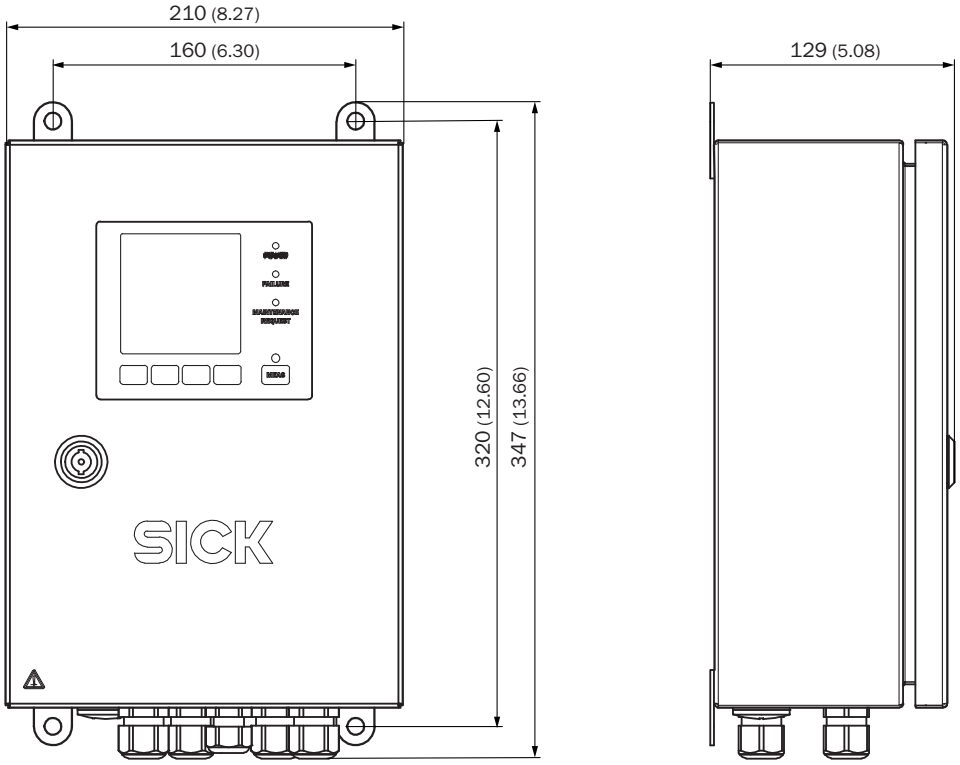
VISIC50SF sensor unit closed



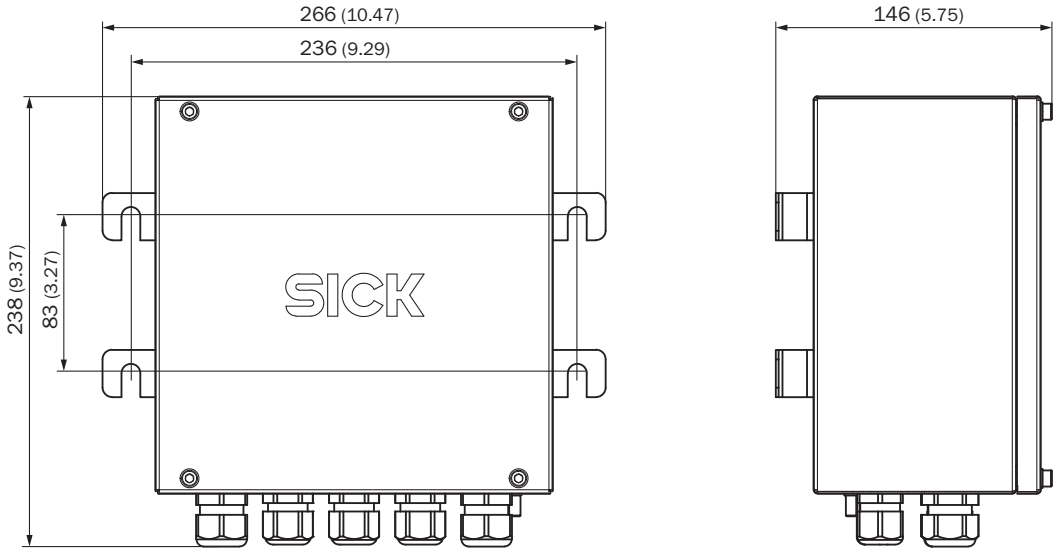
VISIC50SF sensor unit open with clipped-on front cover



TAD control unit

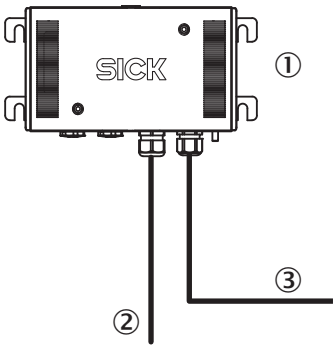


VISIC50SF connecting unit



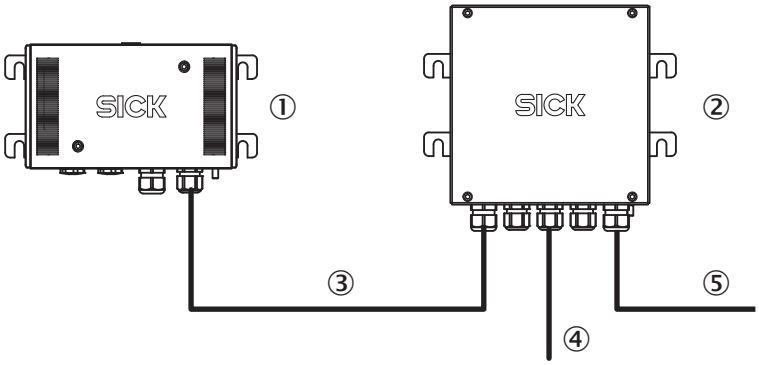
Connection types

Standard version



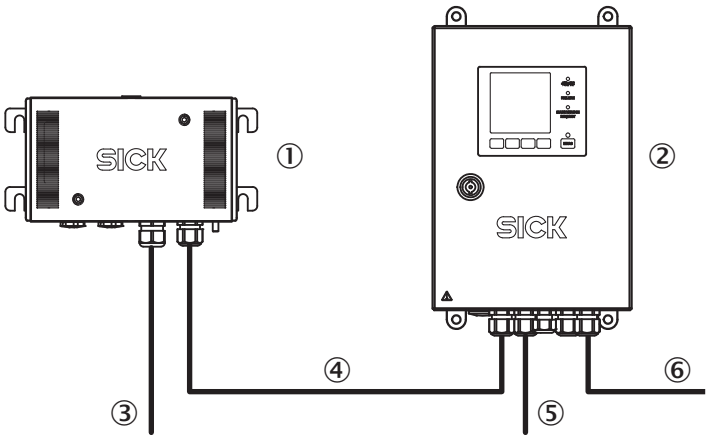
① VISIC50SF sensor unit
② Power supply (24 V)
③ Analog and digital signals or data bus

Version with terminal box



① VISIC50SF sensor unit
② VISIC50SF connecting unit
③ Analog and digital signals or data bus, incl. power supply (24 V)
④ Power supply (230 V)
⑤ Analog and digital signals or data bus

Version with TAD control unit



① VISIC50SF sensor unit
② TAD control unit
③ Power supply (24 V)
④ Analog and digital signals or data bus (max. length = 1,200 m)
⑤ Power supply (230 V)
⑥ Analog and digital signals or data bus

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