



SIM2000-2 P

SYSTEM SOLUTIONS

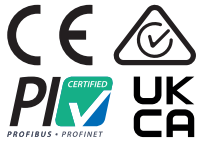
SICK
Sensor Intelligence.



Ordering information

Type	part no.
SIM2000-2 P	1117588

Other models and accessories → www.sick.com/



Detailed technical data

Features

Supported products	Encoder Code reader RFID read/write device SICK LiDAR sensors
Technology	ARMv8 architecture Preinstalled SICK SensorApp for track and trace systems
Random Access Memory	4 GB DDR4
Flash memory	16 GB eMMC, of which 12 GB are available for applications
Memory card (optional)	2 industrial-grade microSD memory cards (flash card) SD card 2 must be in the card slot before starting the device, it cannot be dynamically plugged in and used while the device is running. Supported microSD memory cards: <ul style="list-style-type: none"> microSD card 1: max. 2 TB (SDXC, SDHC, SD); FAT 12/16/32, EXT 2/3/4; intended for saving application-specific alibi data microSD card 2: max. 32 GB (SDHC, SD); FAT 12/16/32, EXT 2/3/4; intended for saving application-specific cloning/configuration data
Sensor data processing	According to the preinstalled SensorApp

Mechanics/electronics

Control elements	1 selector switch 2 S1 and S2 switches for GND ISO/GND
Electrical connection	
Power	X1, spring terminal
DIGITAL IO	X2, spring terminal
Output	X3, spring terminal
Trigger	X4, spring terminal
Increment	X5, spring terminal
Serial A	X6, spring terminal
Serial B	X7, spring terminal
CAN	X8, spring terminal
	X9-X14, RJ45

¹⁾ In accordance with EN 61010, also applies to digital inputs.

²⁾ Chemical system: Lithium manganese dioxide (Li-MnO₂).

Operating voltage	24 V DC, $\pm 20\%$ ¹⁾
Operating current	Must be limited by external power supply unit to max. 6 A
Power consumption	Typ. 15 W (At full CPU load, no sensors connected)
Power output	100 W (total, all connections)
Output current	
X2 switching output	100 mA (per output)
X3 switching output	100 mA (per output)
X2 voltage supply	≤ 700 mA
X4, X5 voltage supply	700 mA (total)
Battery type: 1632	3 V (Replaceable, non-rechargeable) ²⁾
Housing material	Aluminum die cast
Housing color	Uncoated aluminum
Protection class	III
Weight	1,475 g
Dimensions (L x W x H)	225 mm x 132.5 mm x 73 mm

¹⁾ In accordance with EN 61010, also applies to digital inputs.

²⁾ Chemical system: Lithium manganese dioxide (Li-MnO₂).

Safety-related parameters

MTTF_D	276 years
-------------------------	-----------

Interfaces

Ethernet	✓ (4)
Function	Data interface (read result output), Service interface, image transmission
Data transmission rate	ETH1 – 4: 0.01; 0.1; 1 Gb/s
Protocol	TCP/IP, FTP (image transmission)
Foundation Fieldbus	✓ (2)
Function	Ethernet-based fieldbus
Data transmission rate	10/100 MBit/s
Protocol	ProfiNet, Ethernet/IP, EtherCAT (under development)
Serial	✓ (4)
Function	RS-232, RS-422, RS-485
Data transmission rate	RS-232: 115,2 kBaud, RS-422/RS-485: 2 MBaud
CAN	✓
Function	SICK CAN sensor network (master/slave, multiplexer/server), termination can be controlled via app
Data transmission rate	20 kbit/s ... 1 Mbit/s
Protocol	CSN (SICK CAN Sensor Network)
USB	✓ , USB 2.0
Function	For configuration, diagnosis, firmware update
Digital inputs/outputs	
X2	2 configurable inputs/outputs
X2	2 inputs
X3	4 non-insulated outputs (push-pull)

	X4	4 isolated inputs for trigger signals
	X5	4 isolated inputs for incremental signals
Display connection		Connection for monitor for diagnostics and service (under development)

Ambient data

Electromagnetic compatibility (EMC)	IEC 61000-6-2:2016 / EN IEC 61000-6-2:2019, IEC 61000-6-4:2018 / EN IEC 61000-6-4:2019, IEC 61131-9:2013-09
Vibration resistance	IEC 60068-2-6: 2007, Sine IEC 60068-2-64:2008, Broadband
Shock resistance	EN 60068-2-27:2009-05
Electrical safety	IEC 61010-1:2010 + COR:2011 + A1:2016, modifiziert + A1:2016/COR1:201
Enclosure rating	IP20 (Device must be installed in a control cabinet of at least IP54 rating)
Ambient conditions	Installation location: For use inside buildings Altitude: max. 2,000 m Degree of contamination: 1
Ambient operating temperature	0 °C ... +60 °C ^{1) 2)}
Ambient temperature, storage	-20 °C ... +70 °C ¹⁾

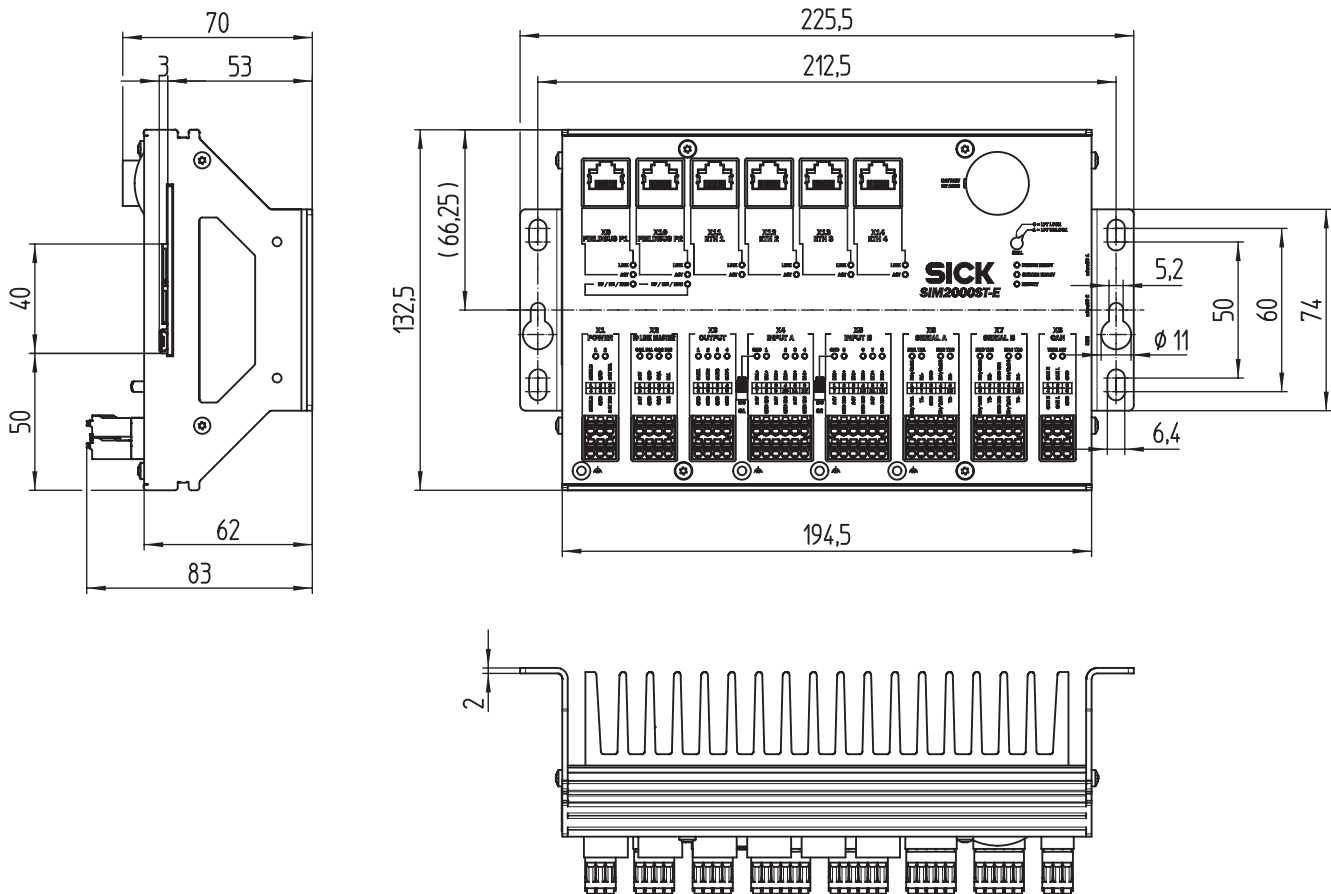
¹⁾ Permissible relative humidity: 0% ... 90% (non-condensing).

²⁾ While taking account of the mounting requirements described, see operating instructions. In the event of overtemperature, the device protects itself by resetting and then restarting.

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓
Profinet certificate	✓
Ethernet/IP certificate	✓

Dimensional drawing



Dimensions in mm (inch)

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