



# SIM2000-2 P

SYSTEM SOLUTIONS

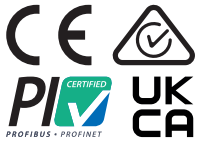
**SICK**  
Sensor Intelligence.



## Ordering information

Type	part no.
SIM2000-2 P	1117588

Other models and accessories → [www.sick.com/](http://www.sick.com/)



## Detailed technical data

### Features

<b>Supported products</b>	Encoder Code reader RFID read/write device SICK LiDAR sensors
<b>Technology</b>	ARMv8 architecture Preinstalled SICK SensorApp for track and trace systems
<b>Random Access Memory</b>	4 GB DDR4
<b>Flash memory</b>	16 GB eMMC, of which 12 GB are available for applications
<b>Memory card (optional)</b>	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"> <li>microSD card 1: max. 2 TB (SDXC, SDHC, SD); FAT 12/16/32, EXT 2/3/4; intended for saving application-specific alibi data</li> <li>microSD card 2: max. 32 GB (SDHC, SD); FAT 12/16/32, EXT 2/3/4; intended for saving application-specific cloning/configuration data</li> </ul>
<b>Sensor data processing</b>	According to the preinstalled SensorApp

### Mechanics/electronics

<b>Control elements</b>	1 selector switch 2 S1 and S2 switches for GND ISO/GND
<b>Electrical connection</b>	
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

<sup>1)</sup> In accordance with EN 61010, also applies to digital inputs.

<sup>2)</sup> Chemical system: Lithium manganese dioxide (Li-MnO<sub>2</sub>).

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

<sup>1)</sup> In accordance with EN 61010, also applies to digital inputs.

<sup>2)</sup> Chemical system: Lithium manganese dioxide (Li-MnO<sub>2</sub>).

### Safety-related parameters

<b>MTTF<sub>D</sub></b>	276 years
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### Interfaces

<b>Ethernet</b>	✓ (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)
<b>Foundation Fieldbus</b>	✓ (2)
Function	Ethernet-based fieldbus
Data transmission rate	10/100 MBit/s
Protocol	ProfiNet, Ethernet/IP, EtherCAT (under development)
<b>Serial</b>	✓ (4)
Function	RS-232, RS-422, RS-485
Data transmission rate	RS-232: 115,2 kBaud, RS-422/RS-485: 2 MBaud
<b>CAN</b>	✓
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)
<b>USB</b>	✓ , USB 2.0
Function	For configuration, diagnosis, firmware update
<b>Digital inputs/outputs</b>	
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
<b>Display connection</b>	Connection for monitor for diagnostics and service (under development)	

#### Ambient data

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

<sup>1)</sup> Permissible relative humidity: 0% ... 90% (non-condensing).

<sup>2)</sup> 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

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



## 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](http://www.sick.com)