



# SIM2000-3P00A00

## SIM2x00

EDGE COMPUTING DEVICES

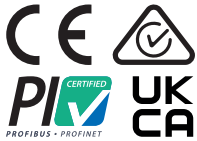
**SICK**  
Sensor Intelligence.



## Ordering information

Type	part no.
SIM2000-3P00A00	1112345

Other models and accessories → [www.sick.com/SIM2x00](http://www.sick.com/SIM2x00)



## Detailed technical data

## Features

<b>Product category</b>	Programmable
<b>Generation</b>	Third generation
<b>Supported products</b>	2D and 3D LiDAR sensors Image-based code readers Bar code scanners RFID read/write device Displacement measurement sensors Incremental and absolute encoders Photoelectric sensors
<b>Processor</b>	2 x Cortex-A72 4 x Cortex-A53 2 x Cortex-M4
<b>Random Access Memory</b>	4 GB DDR4
<b>Flash memory</b>	16 GB eMMC, of which 12 GB are available for applications
<b>Programming software</b>	SICK AppStudio Can be programmed within the SICK AppSpace environment
<b>Toolkit</b>	SICK algorithm API
<b>Further functions</b>	Dedicated fieldbus controller

## Mechanics/electronics

<b>Connections</b>	X1, X2, X3, X4, X5, X6, X7, X8, X9-X12, X13-X14, 1 x Micro-B, spring terminal, spring terminal, spring terminal, spring terminal, spring terminal, spring terminal, spring terminal, RJ45, RJ45, (under preparation) <sup>1)</sup>
<b>Supply voltage</b>	24 V DC, ± 20 %
<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	≤ 700 mA (total)

<sup>1)</sup> Under preparation.

X4, X5 voltage supply	700 mA (total)
<b>Enclosure rating</b>	IP20
<b>Protection class</b>	III
<b>Electrical safety</b>	EN 61010
<b>Housing material</b>	Aluminum die cast
<b>Housing color</b>	Aluminum (unpainted)
<b>Weight</b>	1,475 g
<b>Dimensions (L x W x H)</b>	225.5 mm x 132.5 mm x 83 mm

<sup>1)</sup> Under preparation.

## Interfaces

<b>Ethernet</b>	✓ (4) , TCP/IP, FTP, OPC UA, MQTT
Remark	X9-X12
Function	Data output, Configuration, firmware update, image transmission
Data transmission rate	20 kbit/s ... 230 kBaud, 10/100/1,000/2,500 Mbit/s
<b>PROFINET</b>	✓ (2) , RS-232, RS-422, RS-485
Remark	X13-X14
Function	Dual port Ethernet-based fieldbus, (In progress), firmware update
Data transmission rate	≤ 1 Mbit/s, 10/100 MBit/s
<b>EtherNet/IP™</b>	✓ (2) , USB 2.0
Remark	X13-X14
Function	Dual port Ethernet-based fieldbus, diagnosis
Data transmission rate	10/100 MBit/s
<b>EtherCAT®</b>	✓ (2) , RS-232
Remark	X13-X14, in preparation
Function	Dual port Ethernet-based fieldbus
Data transmission rate	10/100 MBit/s
<b>DIGITAL IO</b>	✓ (2) , USB 2.0
Remark	X2
Function	IO-Link Master
Data transmission rate	RS-232: 115,2 kBaud, RS-422/RS-485: 2 MBaud
<b>Serial</b>	✓ (4)
Remark	X6-X7
Function	Serial interface
Data transmission rate	RS-232: 115,2 kBaud, RS-422/RS-485: 2 MBaud
<b>CAN</b>	✓
Remark	X8
Function	SICK CAN sensor network CSN (CAN controller/CAN device, multiplexer/server) with activatable termination resistor
<b>USB</b>	✓
Function	For configuration
<b>Operator interfaces</b>	Web server (GUI), SICK AppStudio (programming), SICK AppManager (app installation, firmware update), SOPAS ET

<b>Data storage and retrieval</b>	Image and data logging via optional microSD memory card, internal RAM and external FTP
<b>Memory card(s)</b>	Two industrial-grade microSD memory cards (flash card); supported microSD memory cards; MicroSD card 1: max. 2 TB (SDXC, SDHC, SD); FAT 12/16/32, EXT 2/3/4, MicroSD card 2: max. 32 GB (SDHC, SD); FAT 12/16/32, EXT 2/3/4
<b>Digital inputs/outputs</b>	
DIGITAL IO	2 inputs/outputs (Configurable including IO-Link (in progress))
Output	4 outputs (Not isolated)
Input A/B	4 inputs each (insulated)
<b>Control elements</b>	1 selector switch 2 S1 and S2 switches for GND ISO/GND

## Ambient data

<b>Electromagnetic compatibility (EMC)</b>	IEC 61000-6-2:2016 / EN IEC 61000-6-2:2019 IEC 61000-6-3:2006+AMD 1:2010 / EN 61000-6-3:2007+A1:2011 EN 61131-9:2013-09
<b>Shock load</b>	EN 60068-2-27:2009-05
<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.

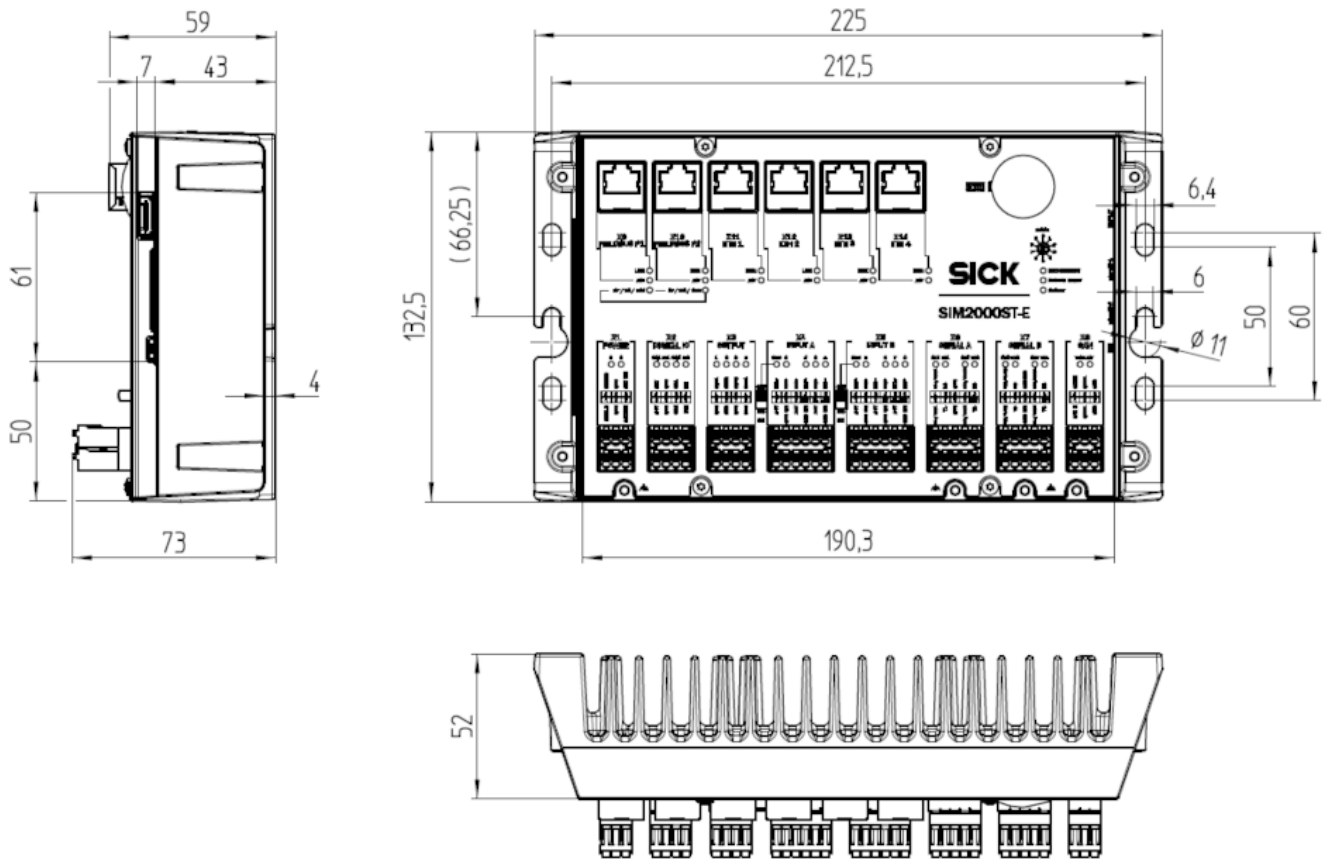
## Certificates

<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>	✓

## Classifications

<b>ECLASS 5.0</b>	27242208
<b>ECLASS 5.1.4</b>	27242608
<b>ECLASS 6.0</b>	27242608
<b>ECLASS 6.2</b>	27242608
<b>ECLASS 7.0</b>	27242608
<b>ECLASS 8.0</b>	27242608
<b>ECLASS 8.1</b>	27242608
<b>ECLASS 9.0</b>	27242608
<b>ECLASS 10.0</b>	27242608
<b>ETIM 5.0</b>	EC001604
<b>ETIM 6.0</b>	EC001604
<b>ETIM 7.0</b>	EC001604
<b>ETIM 8.0</b>	EC001604
<b>UNSPSC 16.0901</b>	32151705

## Dimensional drawing



Dimensions in mm (inch)

Overview SICK AppSpace



## 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)