



SIM2500-2AX1G10 Nova LMS4000 QI SIM2x00

EDGE COMPUTING DEVICES

SICK
Sensor Intelligence.



Ordering information

Type	part no.
SIM2500-2AX1G10 Nova LMS4000 QI	1143300

Other models and accessories → www.sick.com/SIM2x00



Detailed technical data

Features

Technology	2D LiDAR, image analysis
Product category	Configurable, programmable
Supported products	LMS4000
SensorApp	Nova LMS4000
License included	Quality Inspection License
Expansion options	The SICK Nova Tool plug-in enables customer-specific or new tools to be added. Development and customization of the tools is supported by SICK AppSpace and SICK AppStudio.
License type	The software is provided as a device license. A license is bound to a specific hardware ID.
License period	The license is issued without a time limit.
Language	English, German, French, Italian, Spanish, Japanese, Korean, Chinese
Documentation	Operating instructions
Processor	8-core ARM Cortex-A72 CPU with NEON accelerator FPGA co-processor for image processing (object finder)
Toolkit	SICK Nova

Mechanics/electronics

Connections	I/O, Power, SERIAL, INC, Fieldbus, CAN, SENSOR S1-S6, Ethernet with PoE, USB	1 x M12, 8-pin female connector, A-coded, 1 x M12, 4-pin male connector, T-coded, 1 x M12, 8-pin female connector, A-coded, 1 x M12, 8-pin female connector, A-coded, 2 x M12, 4-pin female connector, D-coded, 1 x M12, 5-pin female connector, A-coded, M12, 5-pin female connector, A-coded, 4 x M12, 8-pin female connector, X-coded, 1 x Micro-B, Under the servicing panel
Supply voltage		24 V DC, ± 10 %
Power consumption		Typ. 45 W
Power output		140 W, total, all connections
Output current	SENSOR S1-S4	≤ 1 A (on power supply pin)
	SENSOR S5-S6	≤ 2.5 A (on power supply pin)
	SENSOR S5-S6	≤ 3.2 A (≤ 10 kHz, rise time/fall time/delay < 10µs when power gate-API used)
	CAN	≤ 1 A (on power supply pin)
	SERIAL	≤ 0.5 A (on power supply pin)

	INC	≤ 500 mA (on power supply pin)
	I/O	On power supply pin
Enclosure rating		IP65
Electrical safety		EN 61010
Housing color		Light blue (RAL 5012)
Weight		1,995 g
Dimensions (L x W x H)		176 mm x 83 mm x 196 mm

Interfaces

Ethernet		✓ (4) , TCP/IP, FTP, OPC UA, MQTT
	Type of fieldbus integration	GigE machine vision/GenICAM
	Remark	Fieldbus ports, in preparation
	Function	Configuration, image transmission, Data output, software updates
	Data transmission rate	10/100/1,000/2,500 Mbit/s
PROFINET		✓ (2)
	Remark	Fieldbus-Ports
	Function	Dual port Ethernet-based fieldbus
	Data transmission rate	10/100 MBit/s
EtherNet/IP™		✓ (2)
	Remark	Fieldbus ports, in preparation
	Function	Dual port Ethernet-based fieldbus
	Data transmission rate	10/100 MBit/s
Memory card(s)		Industry-grade microSD memory card (flash card), max. 32 GB, optional
Digital inputs/outputs		
	I/O	2 opto-decoupled inputs (Max. frequency: 30 kHz)
	I/O	2 inputs/outputs (can be configured) (Max. frequency: 30 kHz)
	SENSOR S1-S4	1 input each (Max. frequency: 30 kHz)
	SENSOR S1-S4	1 input/output each (can be configured) (Max. frequency: 30 kHz)
	SENSOR S5	1 input (Max. frequency: 10 kHz)
	SENSOR S5	2 inputs/outputs (can be configured) (Max. frequency: 30 kHz)
Expansion options		The SICK Nova Tool plug-in enables customer-specific or new tools to be added. Development and customization of the tools is supported by SICK AppSpace and SICK AppStudio.

Ambient data

Electromagnetic compatibility (EMC)	IEC 61000-6-2:2016 EN IEC 61000-6-2:2019 IEC 61000-6-3:2020
Shock load	IEC 60068-2-27:2008
Ambient operating temperature	0 °C ... +50 °C ^{1) 2)}

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

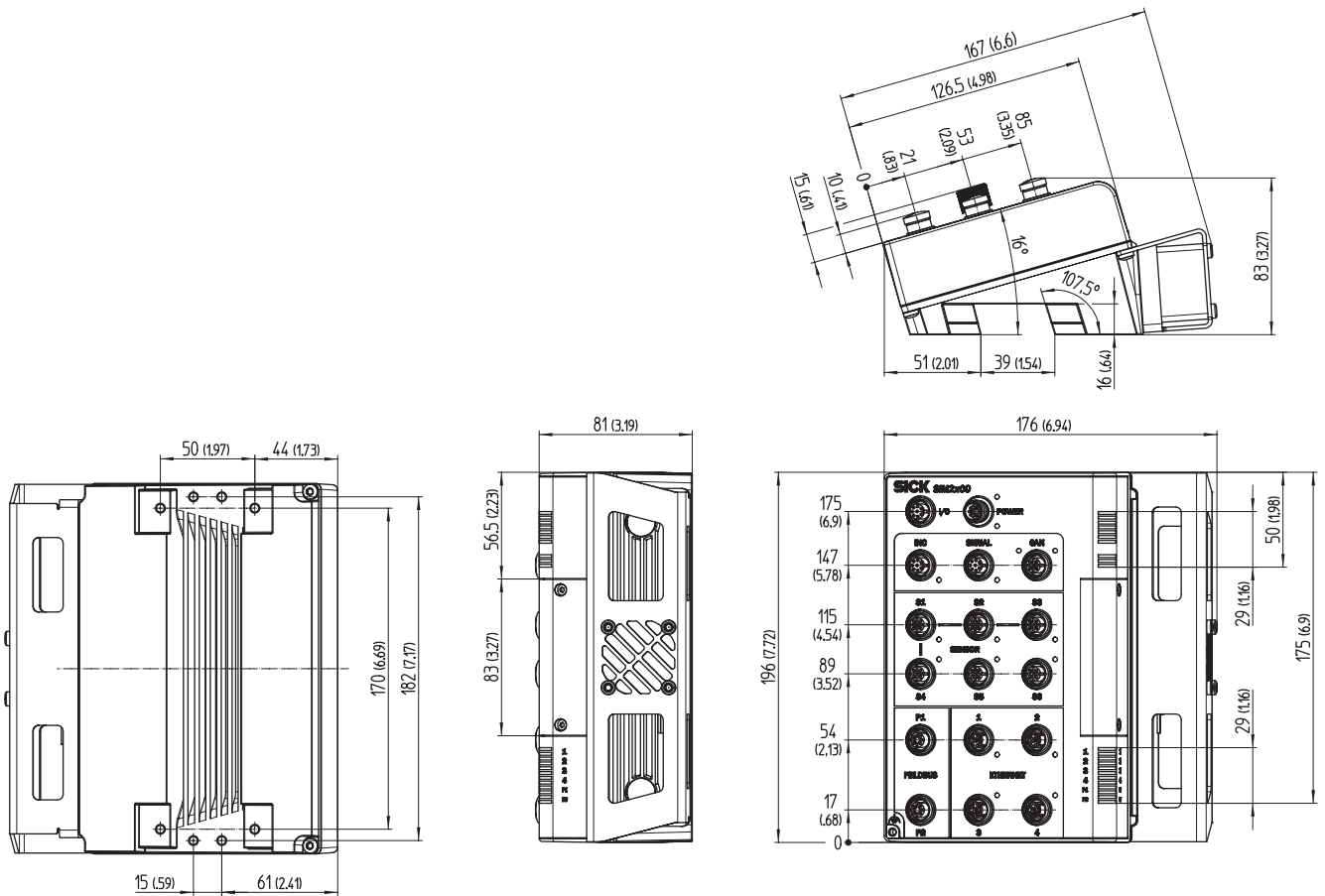
²⁾ While taking account of the mounting requirements described, see operating instructions. In the event of overtemperature, the device protects itself by resetting and then restarting.

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓

ACMA declaration of conformity	✓
China RoHS	✓

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