

Kaspersky IoT

Secure Gateway 100

Cyber Immune data gateway for the industrial internet of things and a key tool for building end-to-end digital services for the digital transformation of enterprises.

Developed on the basis of the KasperskyOS operating system and the Siemens SIMATIC IOT2040 hardware platform.



Cyber Immunity against threats



OS-level security by design. The device performs its critical functions even in aggressive environments.

Software data diode



The flow of information through the gateway goes only in the direction of the cloud. Connected equipment is protected against external influence by potential cybercriminals.

Works with an IIoT cloud



KISG 100 is compatible with MQTT-supported industrial cloud platforms. It also can be connected to the Siemens MindSphere industrial cloud platform.

Operating system KasperskyOS:

- All OS entities/domains are strictly isolated and therefore cannot impact each other
- Proprietary microkernel blocks unauthorized interactions based on security verdicts by default
- Verdicts are determined by the Kaspersky Security System engine based on security policies enabling flexible configuration

Protocol OPC UA (Client-Server communication model)

- Cloud platform connection**
- IIoT platforms with integrated MQTT broker
 - Siemens MindSphere (via to MindConnect Library support)

KasperskyOS is open for development. KISG 100 components can be supplemented with new ones as required.

**Let's start your
Cyber Immune
digitalization
together!**

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Hardware platform

Siemens SIMATIC IOT2040 technical specifications

TECHNICAL DATA

Type of supply voltage	24V DC (9...36V)
Processor type	Intel Quark X1020
Drive	microSD 16GB
Type of memory	DDR3-SDRAM
RAM	1GB
Industrial Ethernet interfaces (100 Mbps)	2 x Ethernet (RJ45)
Degree and class of protection – IP (front)	IP20

EMC

Interference immunity against discharge of static electricity	±4kV contact discharge according to IEC 61000-4-2; ±8kV air discharge according to IEC 61000-4-2
Interference immunity against high-frequency electromagnetic fields	10V/m for 80-1,000MHz, 80% AM according to IEC 61000-4-3; 3V/m for 1.4-2GHz, 80% AM according to IEC 61000-4-3; 1V/m for 2-2.7GHz, 80% AM according to IEC 61000-4-3; 10V for 150kHz-80MHz, 80% AM according to IEC 61000-4-6
Interference immunity against voltage surge:	
· Asymmetric interference	±2kV according to IEC 61000-4-5, surge asymmetric
· Symmetric interference	±1kV according to IEC 61000-4-5, surge symmetric
Interference immunity to magnetic fields at 50 Hz	100A/m; according to IEC 61000-4-8
Emission of conducted and non-conducted interference via line/AC current cables	EN 61000-6-4:2007 + A1:2011

AMBIENT CONDITIONS

Ambient temperature during operation	from 0°C to 50°C
Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 85% at 30°C (no condensation); Storage/transportation: 5% to 95% at 22/55°C (no condensation)
Vibration load during operation	Tests according to IEC 60068-2-6: 5Hz to 9Hz: 3.5mm; 9Hz to 200Hz: 9.8m/s ²
Shock load during operation	Tests according to IEC 60068-2-27: 150m/s ² , 11ms
Dimensions	Width 144mm, height 90mm, depth 53mm