

IEC-G102-BP Series

2-port Gigabit Industrial Intrusion Prevention System (IPS) device with hardware bypass



Features and Benefits

- Ultra-compact industrial security box with IPS/IDS
- Granular policy enforcement with whitelisting control
- LAN Bypass design to prevent a single point of failure and traffic overloading
- Bump-in-the-wire installation without impacting the network

Certifications



Introduction

The Moxa IEC-G102-BP Series industrial next-generation IPS devices protect mission-critical assets with industrial-grade IPS and whitelisting. Meanwhile, the Security Dashboard Console (SDC) software, when used together with the IEC-G102-BP Series, offers another layer of protection through centralized critical asset visibility, network analysis, and auto pattern updating.

Centrally Manage Network Security and Enhance OT Visibility

The IEC-G102-BP Series sniffs the network traffic and gives users the visibility of existing assets and connections, which help administrators and operators understand the condition of current OT system. With connecting to Security Dashboard Console, a security management platform, the administrators or operators can effectively manage and monitor all the intrusion prevention systems in one place. This provides an easier way to monitor the devices and execute policy updates, firmware updates, and pattern updates.

Dynamically Prevent Malicious Cyber Threat Activity Affecting Your System

The IEC-G102-BP Series is designed to protect mission-critical assets at the OT network edge. It silently analyzes your network traffic in the background and offers granular behavior monitoring and control of cyber activities. These IPS devices provide both “Monitor” and “Protect” modes to facilitate different OT scenarios. Monitoring mode gives administrator full visibility of cyber threat activities. In the case of an emergency, administrators can easily switch to “Protect” mode to block and contain any malicious operations.

Industrial Protocol Whitelist Control for Mission-critical Assets

Using advanced Deep Packet Inspection (DPI) technology, the IEC-G102-BP Series is equipped with industrial protocol awareness to offer granular command of control system traffic to critical controllers.

Virtual Patching and Intelligent Threat Protection

Frequently patching significantly reduces a system’s exposure to the cyberthreats. However, patching continues to be a critical challenge in OT environment because OT applications cannot afford interrupting operations by shutting down systems to apply patches. Virtual patching technology can help complement existing patch management processes by shielding known and unknown vulnerabilities. Virtual patching acts as an agentless emergency security tool that OT administrators and operators can use to quickly remedy vulnerabilities on affected OT equipment. The IEC-G102-BP Series provides advanced protection against threats with its up-to-date threat information, and offers your systems exclusive protection from undisclosed and zero-day threats.

Specifications

Input/Output Interface

Buttons

Reset button

Ethernet Interface	
10/100/1000BaseT(X) Ports (RJ45 connector)	2
Standards	IEEE 802.3 for 10BaseT IEEE 802.3ab for 1000BaseT(X) IEEE 802.3u for 100BaseT(X)
LED Interface	
LED Indicators	PWR1, PWR2, MANAGED, IPS/IDS, USB/F, BYPASS, 10/100/1000M
DoS and DDoS Protection	
Technology	ICMP Flood, IGMP Flood, UDP Flood, UDP port scan, TCP SYN Flood, TCP Port SYN Scan, TCP Port FIN Scan, TCP Port NULL Scan, TCP Port Xmas Scan
Firewall	
IPS Throughput	> 200 Mbps
Latency	< 500 microseconds
Concurrent Connection (TCP)	10,000
Deep Packet Inspection	Modbus TCP Modbus UDP EtherNet/IP Profinet-DCP CIP Omron FINS Mitsubishi SLMP Siemens S7 Comm. Siemens S7 Comm. Plus With more available through firmware update
Policy Enforcement Rules	64 rules
ICS Protocol Filter Profiles	32 profiles
Real-Time Firewall / VPN Event Log	
Event Type	Cybersecurity, Policy enforcement, Protocol Filter, Assets detection, System event
Media	Local storage, Syslog server
Serial Interface	
Console Port	USB Type-C
Power Parameters	
Connection	Removable terminal block
Input Current	0.605 A @ 12 VDC, 0.297 A @ 24 VDC, 0.143 A @ 48 VDC
Physical Characteristics	
Housing	Metal
Dimensions	40 x 70 x 83 mm (1.58 x 2.76 x 3.27 in)
Weight	322 g (0.71 lb)
Installation	DIN-rail mounting, Wall mounting (with optional kit)

Environmental Limits

Operating Temperature	Standard Models: -10 to 60°C (14 to 140°F) Wide Temp. Models: -40 to 75°C (-40 to 167°F)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

Safety	UL 60950-1 Ed.2, UL 62368-1
EMC	EN 55032/35
Hazardous Locations	UL/cUL Class I Division 2 Groups D
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 0.5 kV; Signal: 1 kV IEC 61000-4-6 CS: 3 V IEC 61000-4-8 PFMF
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

MTBF

Time	1,340,000 hrs
Standards	Telcordia (Bellcore), GB

Warranty

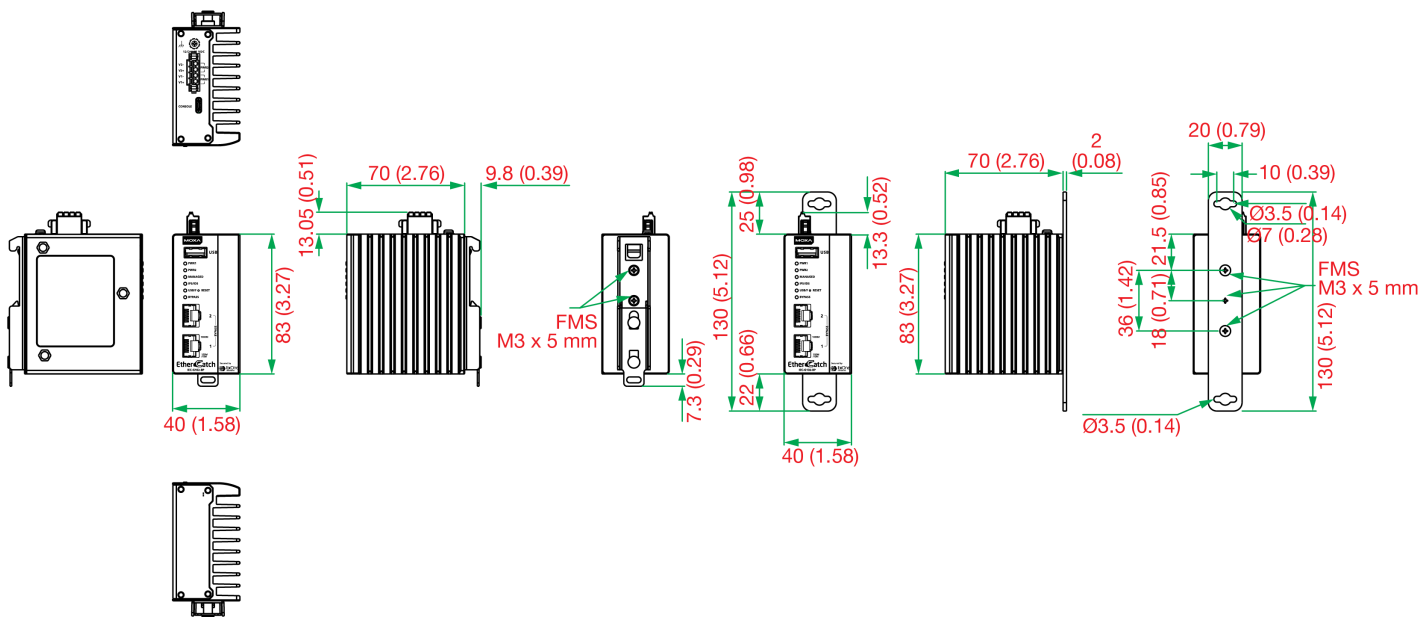
Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x IEC-G102-BP Industrial next-generation IPS
Cable	1 x USB-C to DB9 cable
Installation Kit	DIN and USB cap
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	10/100/1000BaseT(x) Ports, RJ45 Connector	SDC Manageable	Automatic Pattern Update	Manual Pattern Update	Operating Temp.
IEC-G102-BP-Pro	2	Yes	Yes	Yes	-10 to 60°C
IEC-G102-BP-Pro-T	2	Yes	Yes	Yes	-40 to 75°C
IEC-G102-BP-SA	2	No	No	Yes	-10 to 60°C
IEC-G102-BP-SA-T	2	No	No	Yes	-40 to 75°C

Accessories (sold separately)

License Model

IEC-Renew-1Y	1-year 1 node IEC renewal license
IEC-Renew-2Y	2-year 1 node IEC renewal license
IEC-Renew-4Y	4-year 1 node IEC renewal license
SDC-25-1Y	1-year 25 nodes SDC license
SDC-25-3Y	3-year 25 nodes SDC license
SDC-25-5Y	5-year 25 nodes SDC license
SDC-50-1Y	1-year 50 nodes SDC license
SDC-50-3Y	3-year 50 nodes SDC license
SDC-50-5Y	5-year 50 nodes SDC license
SDC-100-1Y	1-year 100 nodes SDC license
SDC-100-3Y	3-year 100 nodes SDC license
SDC-100-5Y	5-year 100 nodes SDC license
SDC-150-1Y	1-year 150 nodes SDC license
SDC-150-3Y	3-year 150 nodes SDC license
SDC-150-5Y	5-year 150 nodes SDC license
SDC-200-1Y	1-year 200 nodes SDC license
SDC-200-3Y	3-year 200 nodes SDC license

SDC-200-5Y	5-year 200 nodes SDC license
SDC-Add-4Q	1-year 1 node add-on SDC license

Storage Kits

ABC-02-USB	Configuration backup and restoration tool, firmware upgrade, and log file storage tool for managed Ethernet switches and routers, 0 to 60°C operating temperature
ABC-02-USB-T	Configuration backup and restoration tool, firmware upgrade, and log file storage tool for managed Ethernet switches and routers, -40 to 75°C operating temperature

Wall-Mounting Kits

WK-20-01	Wall-mounting kit, 1 plate, 2 screws, 20 x 130 mm
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