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 sniffers network traffic and gives users full visibility of current assets and connections, which helps administrators and operators understand the real-time conditions of the OT system. When connected to Security Dashboard Console, a security management platform, the administrators or operators can effectively manage and monitor all the intrusion prevention systems from a single space. This provides an easier way to monitor the devices and execute policy, firmware, 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 administrators 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

Frequent patching significantly reduces a system’s vulnerability to cyberthreats. However, patching continues to be a major challenge in OT environments 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 address vulnerabilities on affected OT equipment quickly. The IEC-G102–BP Series provides advanced protection against threats with up-to-date threat information and guards your systems against undisclosed and zero-day threats.

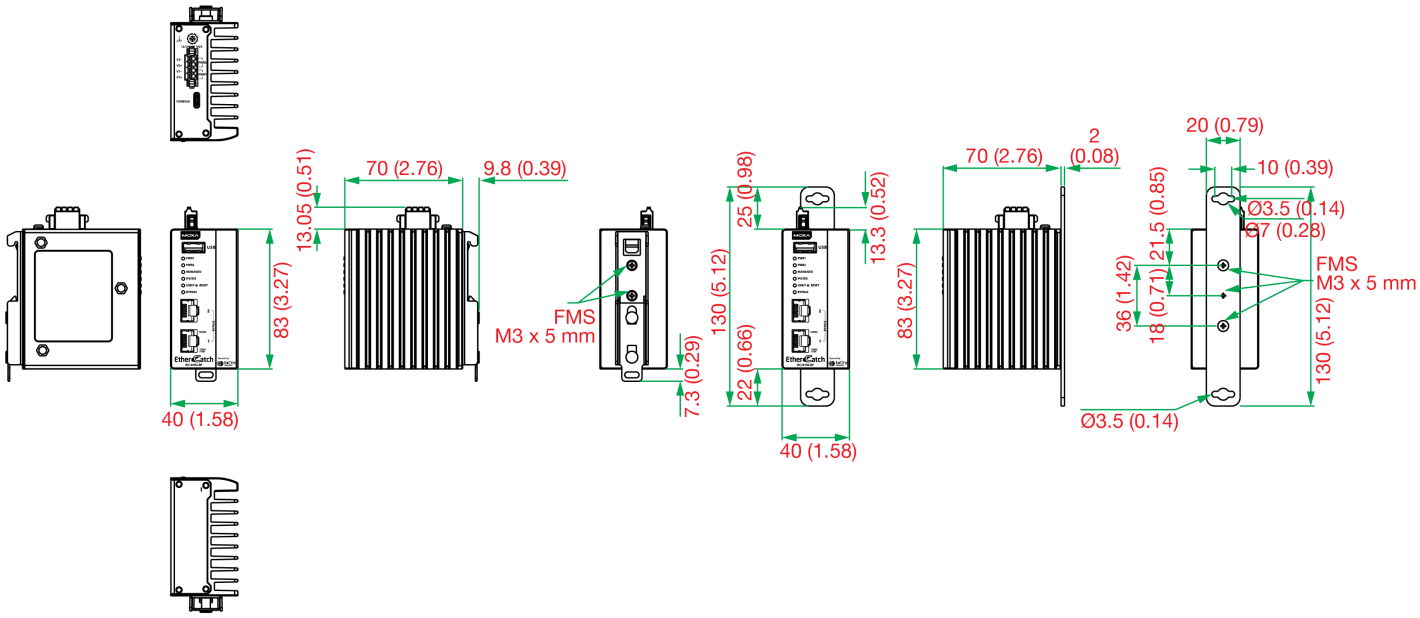
Flexible License Upgrades

The IEC-G102-BP Series supports flexible, on-demand expansion through Moxa’s license platform. As your network grows, you can purchase additional licenses based on your needs. The IEC-G102-BP Series supports the following licenses:

- IEC-New-1Y: 1-year, 1 node IEC license
- 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-New-1Y: 1-year, 1 node SDC license
- SDC-New-3Y: 3-year, 1 node SDC license
- SDC-New-5Y: 5-year, 1 node SDC license
- SDC-Renew-1Y: 1-year, 1 node SDC renewal license
- SDC-Add-4Q: 1-year, 1 node SDC add-on license

Dimensions

Unit: mm (inch)



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, TCP SYN Flood, TCP Port SYN Scan, TCP Port FIN Scan, TCP Port NULL Scan, TCP Port Xmas Scan, UDP Port Scan

Firewall

IPS Throughput	> 200 Mbps
Latency	< 500 microseconds
Deep Packet Inspection	Modbus TCP Modbus UDP EtherNet/IP PROFINET-DCP CIP SLMP Omron FINS Siemens S7 Comm. Siemens S7 Comm. Plus Additional protocols will be supported through future firmware updates.
Policy Enforcement Rules	64 rules
ICS Protocol Filter Profiles	32 profiles
Concurrent Connections (TCP)	10,0000

Automatic Pattern Updates via SDC	Pro Models: Supported (1 year of updates included) Pro-H Models: Supported (requires IEC pattern update license) SA Models: Not supported
Manual Pattern Updates	Pro Models: Supported (1 year of updates included) Pro-H Models: Supported (requires IEC pattern update license) SA Models: Supported (while under 5-year warranty)

Management

Supported Interfaces	Web GUI and Security Dashboard Console

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
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
Hazardous Locations	UL/cUL Class I Division 2 Groups A/B/C/D
Railway	EN 50121-4
Traffic Control	NEMA TS2
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 caps
Documentation	1 x quick installation guide 1 x warranty card

Ordering Information

Model Name	10/100/1000BaseT(x) Ports, RJ45 Connector	SDC Manageable	Automatic Pattern Updates via SDC	Manual Pattern Updates	Operating Temp.
IEC-G102-BP-Pro	2	Yes	Yes, 1 year of updates included	Yes, 1 year of updates included	-10 to 60°C
IEC-G102-BP-Pro-T	2	Yes	Yes, 1 year of updates included	Yes, 1 year of updates included	-40 to 75°C
IEC-G102-BP-Pro-H	2	Yes	Yes, requires IEC pattern update license	Yes, requires IEC pattern update license	-10 to 60°C
IEC-G102-BP-Pro-H-T	2	Yes	Yes, requires IEC pattern update license	Yes, requires IEC pattern update license	-40 to 75°C
IEC-G102-BP-SA	2	No	No	Yes, while under 5-year warranty	-10 to 60°C
IEC-G102-BP-SA-T	2	No	No	Yes, while under 5-year warranty	-40 to 75°C

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