

EDF-G1002-BP 系列

新一代 2 埠 Gigabit 工業 LAN 防火牆



特色與優點

- 無痛安裝整合至現有網路，不影響網路正常運作
- Gen3 LAN Bypass 功能實現系統容錯
- 工業級入侵防禦/偵測系統 (IPS/IDS)
- 使用深度封包檢測 (DPI) 技術檢查工業通訊協議資料
- 支援安全啟動，以檢查系統完整性
- 一鍵檢查防火牆政策配置錯誤
- 支援 MXstudio，輕鬆實現可視化的工業網路管理

認證



簡介

EDF-G1002-BP 系列是一款工業級 LAN 防火牆，具有 IPS 和 DPI 功能，可保護任務關鍵型資產和區域網路。這些工業防火牆支援可透過軟體配置的 Gen3 LAN Bypass 功能，以實現無痛安裝整合至現有網路，並最大程度地降低其安裝對工業應用的影響，例如 ITS、水處理站中的泵浦處理系統、石油和天然氣中的分散式控制系統、以及工廠自動化中的 PLC/SCADA 系統。

利用 IPS/IDS 動態預防惡意網路威脅活動

EDF-G1002-BP 系列用於透過進階入侵防禦和偵測系統 (IPS/IDS) 保護 OT 網路邊緣的任務關鍵型資產。其於後台分析網路流量，並針對各種網路活動進行行為監控與感知。這些防火牆裝置同時支援「監控」和「保護」模式，以因應不同的 OT 情境。「監控」模式使管理員能夠全面了解網路上的網路威脅活動。偵測到威脅時，管理員可輕鬆切換至「保護」模式，以阻止並抑制任何惡意活動。

針對任務關鍵型資產的工業級深度封包檢測

EDF-G1002-BP 系列支援進階深度封包檢測 (DPI) 技術，提供工業通訊協議資料感知功能，並允許對關鍵控制器的控制系統流量進行精密的監控。

虛擬修補和智慧型威脅防護功能

頻繁修補可以增強對網路威脅的防護。然而，這在 OT 環境中是一項重大挑戰，因為 OT 應用無法承受關閉系統來中斷營運以進行修補的代價。虛擬修補技術可屏蔽已知和未知的安全漏洞，進而彌補現有修補管理程序的不足。虛擬修補是無需安裝額外程式的緊急安全工具，讓 OT 網管人員和操作人員能夠在發現網路攻擊事件後，迅速修補 OT 裝置的安全漏洞。EDF-G1002-BP 系列運用最新的威脅資訊提供進階威脅防護，為您的系統提供專屬的隱藏威脅和即時威脅的安全防護。

集中式網路安全與政策管理

EDF-G1002-BP 系列可幫助管理員和操作人員了解 OT 系統的即時狀態。在連接到 Moxa Mxsecurity 集中式安全管理平台後，管理員即可透過同一管理平台管理並監控所有入侵防禦系統。MXsecurity 提供了一種高效的方法來監控安全資產並執行政策、韌體、設置和模式更新。

規格

Input/Output Interface

Alarm Contact Channels	Resistive load: 1 A @ 24 VDC
Buttons	Reset button
Digital Input Channels	+13 to +30 V for state 1 -30 to +3 V for state 0 Max. input current: 8 mA

Ethernet Interface

10/100/1000BaseT(X) Ports (RJ45 connector)	3 (2 x LAN ports, 1 x MGMT port)
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3ab for 1000BaseT(X) IEEE 802.3x for flow control

LED Interface

LED Indicators	PWR1, PWR2, STATE, BYPASS, USB
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DoS and DDoS Protection

Technology	ARP-Flood FIN Scan ICMP Flood TCP Sessions Without SYN NMAP-ID Scan NMAP-Xmas Scan Null Scan SYN/FIN Scan SYN/RST Scan SYN-Flood Xmas Scan
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Firewall

Throughput	Max. 45K packets per second/500 Mbps (based on RFC 2544)
Filter	DDoS Ethernet protocols ICMP IP address MAC address Ports
Intrusion Prevention System	Enabled by default. IPS pattern update functionality requires an additional license.
Deep Packet Inspection	Modbus TCP Modbus UDP DNP3 IEC 60870-5-104 IEC 61850 MMS EtherNet/IP Omron FINS Siemens S7 Comm. Additional protocols will be supported through future firmware updates.

Real-time Firewall Event Log

Event Type	Firewall events Protocol DPI and IDS/IPS events
Media	Syslog server Local storage SNMP Trap

Serial Interface

Console Port	RS-232 (TxD, RxD, GND), 3-pin (115200, n, 8, 1)
Connector	USB Type-C

Power Parameters

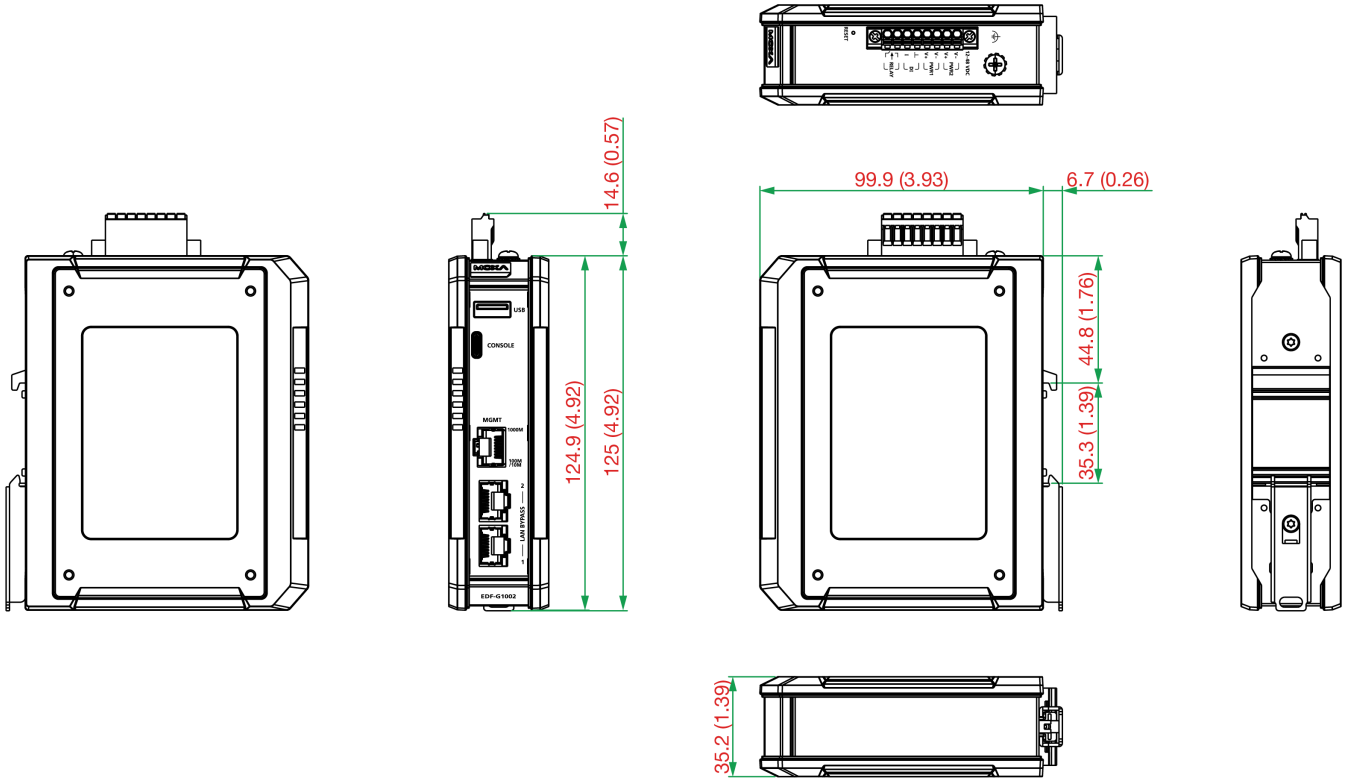
Connection	Removable terminal block
Operating Voltage	9.6 to 60 VDC
Input Voltage	12/24/48 VDC Redundant dual inputs

Input Current	0.69 A (max)
Reverse Polarity Protection	Supported
Physical Characteristics	
Housing	Metal
Dimensions	35 x 125 x 100 mm (1,38 x 4.92 x 3.94 in)
Weight	385 g (0.85 lb)
Installation	DIN-rail mounting Wall mounting
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 (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Standards and Certifications	
Safety	IEC 62368-1 UL 62368-1
EMC	EN 55032/35
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 20 V/m IEC 61000-4-4 EFT: Power: 2 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
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	2,929,641 hrs
Standards	Telcordia (Bellcore), GB
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x EDF-G1002-BP Series industrial LAN firewall
Cable	1 x DB9 female to USB Type-C

Installation Kit	1 x DIN-rail kit 1 x cap, plastic, for USB Type-A port
Documentation	1 x quick installation guide 1 x warranty card

尺寸

單位：公釐（英吋）



訂購資訊

Model Name	10/100/1000BaseT(X) Ports (RJ45 Connector)	10/100/1000BaseT(X) MGMT Ports (RJ45 Connector)	MXsecurity Support	Operating Temperature
EDF-G1002-BP	2	1	P	-10 to 60°C
EDF-G1002-BP-T	2	1	P	-40 to 75°C

配件（選購）

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

Mounting Kits

WK-40-01	Wall-mounting kit, 2 plates, 6 screws, 40 x 58 x 2 mm
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Software

LIC-MXsecurity-NEW-XN-SR	MXsecurity perpetual node license with customizable node quantity (minimum 1 node)
LIC-IPS-MXsecurity-NEW-1Y-XN-SR	1-year IPS license for MXsecurity with customizable node quantity (minimum 1 node)

LIC-IPS-MXsecurity-NEW-XM-XN-DMR	IPS license for MXsecurity with customizable duration and node quantity (minimum 1 month, minimum 1 node)
LIC-IPS-MXsecurity-RENEW-1Y-XN-SR	1-year IPS renewal license for MXsecurity with customizable node quantity (minimum 1 node)
LIC-IPS-MXsecurity-RENEW-XM-XN-DMR	IPS renewal license for MXsecurity with customizable duration and node quantity (minimum 1 month, minimum 1 node)
LIC-IPS-MXsecurity-ADD-1Q-XN-SR	3-month IPS add-on license for MXsecurity with customizable node quantity (minimum 1 node)
LIC-IPS-MXsecurity-ADD-2Q-XN-SR	6-month IPS add-on license for MXsecurity with customizable node quantity (minimum 1 node)
LIC-IPS-MXsecurity-ADD-3Q-XN-SR	9-month IPS add-on license for MXsecurity with customizable node quantity (minimum 1 node)
LIC-IPS-MXsecurity-ADD-4Q-XN-SR	1-year IPS add-on license for MXsecurity with customizable node quantity (minimum 1 node)
LIC-IPS-MXsecurity-ADD-XM-XN-DMR	IPS add-on license for MXsecurity with customizable duration and node quantity (minimum 1 month, minimum 1 node)
LIC-IPS-DEVICE-RENEW-1Y-1N-MR	1-year device-based IPS renewal license
LIC-IPS-DEVICE-NEW-1Y-1N-MR	1-year device-based IPS license

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