

Belden Industrial Firewall

Cyber resilience for industrial networks

Product Bulletin



Detect and stop sophisticated threats with the Belden Industrial Firewall. This next-generation firewall (NGFW) delivers 360-degree cybersecurity, scalable defense in depth and deep visibility for OT networks.

- **Maximize uptime** by implementing cybersecurity policies that prevent disruptions to the network that could arise from threats and anomalies.
- **High availability** that goes beyond redundancy with a multiple firewall solution that can take over traffic if one firewall fails.
- **Reduce risks** by extending beyond firewall activity to deliver intrusion and threat detection and prevention, anti-virus, identity management, and more.
- **Deliver reliable performance** in harsh environments with a compact, industrial-grade design, wide temperature range and hazardous location approvals.
- **Reduce total cost of ownership** by getting comprehensive cybersecurity functionality and edge computing in one solution instead of buying standalone systems.



Key Features

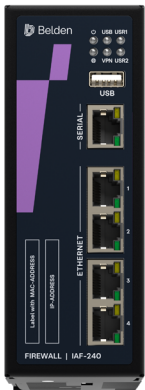
- Network segmentation to reduce attack surfaces and contain threats.
- Stateful firewall for session-aware protection between external and internal networks.
- Support for all major virtual private network (VPN) protocols.
- Built on a trusted technology stack for reliability and business continuity.
- Robust application programming interfaces (APIs) for seamless integration, automation and management of Belden firewalls.
- Exceptional speed and throughput to handle demanding industrial traffic loads.
- Deep packet inspection for many popular industrial communication protocols.
- Centralized management of firewall rules and policies that may be initiated remotely and at scale.

Your Benefits

Cyber threats are evolving—and your defenses should too.

The Belden Industrial Firewall enables layered traffic analysis beyond basic filtering. Stateful packet inspection confirms packets belong to valid sessions, deep packet inspection verifies payload structure and content, and intrusion detection and prevention identify anomalies or malicious patterns in traffic. Together, these capabilities detect threats that traditional firewalls miss.

With unified security tools on one powerful platform, this firewall delivers the visibility, control and speed industrial networks need. You can prevent sophisticated attacks from causing damage, ensuring the network remains secure as new threats emerge.



The Belden Industrial Firewall fuses high-speed performance and advanced features in a complete, industrial-grade security suite. OT and IT teams can use this NGFW to protect OT networks while evolving with the threat landscape.

Applications

Built following the secure development lifecycle, the Belden Industrial Firewall helps industrial organizations keep pace with emerging cybersecurity regulations and directives.

With broad OT protocol support, strong processing power, and a compact, industrial-grade design, this NGFW enables a multi-layered cybersecurity strategy. It supports the enforcement of security policies across several Open Systems Interconnection (OSI) layers, helping organizations strengthen cyber resilience and meet compliance mandates. It's the ideal firewall for future-proofing critical infrastructure and complex operations.

Markets

The Belden Industrial Firewall supports cyber resilience across diverse industrial verticals and discrete and process manufacturing environments. In industrial environments, like automotive, chemical, oil and gas, machine building, semiconductor, and food and beverage, this NGFW defends against downtime. Critical infrastructure sectors, such as power transmission and distribution and water and wastewater, benefit from its robust design and reliable performance.



Technical information

Product Description		Software		
Type	IAF-240	Firmware	Belden OS	
Description	Belden Industrial Firewall	Security	Intrusion Detection & Prevention (IDS/IPS)	
Port Type and Quantity	4 x GbE RJ45 ports		Web Application Firewall (WAF)	
Port Speeds	10/100/1000 Mbps RJ45		Deep Packet Inspection (AMP, DNP3, EtherNet/IP, IEC 61850 GOOSE, IEC104, Modbus TCP, OPC, Siemens S7 and S7 Plus)	
More Interfaces			Anti-Malware	
USB Interface	1 x USB 2.0 port		Web Filtering / Blacklisting	
Serial Interface	1 x RJ45 port (RS232/422/485)		Stateful Packet Inspection Firewall (Packet Filtering, Port Filtering)	
Hardware			Firewall Learning Mode	
CPU	NXP i.MX 8M Mini ARMv8 64-bit Cortex-A53 @ 1.6 GHz (quad core)		Access Control Lists	
Encryption	TPM 2.0 (Hardware based anti-counterfeit, anti-tamper chip)		Certification Management	
Memory	LPDDR4 4 GB		Let’s Encrypt Support	
Storage	64 GB eMMC storage		Network Objects	
Power Requirements			Application Control	
Operating Voltage	Dual 12 - 24 V DC		eXpress Data Path	
Power Consumption	2.5 - 12 W	VPN	IPsec (IKE v2), OpenVPN, WireGuard, WebVPN	
Power Supply	1 x plug-in terminal block, 10-pin	Routing	Layer 3, Layer 2 Bridging	
Ambient Conditions		Dynamic Routing	Network Address Translation (NAT), SNAT, DNAT, BiNAT	
Operating Temperature	-40°C to +70°C	Interfaces	OSPF, BGP	
Storage/Transport Temperature	-40°C to +85°C		Authentication	Web UI, CLI, REST API, NETCONF, RESTCONF
Relative Humidity (non- condensing)	5% to 95%			Identity Awareness (User Identification)
Protective Paint on PCB	No			802.1x Authentication
Mechanical Construction				Multi-Factor Authentication (MFA)
Dimensions (W x H x D)	48 × 137 × 105 mm	Password Quality Detection		
Mounting	DIN Rail 35 mm	Support Tools	Captive Portal	
Enclosure	Aluminum with DIN clip		Logging	
Weight	613 g		Ping, ARPing, Traceroute, Top, Iftop, TCPDump, LLDP, Filemanager, Factory Defaults, Backup & Restore, Restart	
Protection Class	IP30	Protocols	IPv4, IPv6, NTP, VRRP, SNMPv3, PPPoE, DHCP, DNS, DynDNS, SSH, SSL	
Approvals		Identity Provider (IdP) Support	RADIUS, LDAP	
Basis Standard	CE, FCC	Application Support and Management		
Safety	UL 61010	Management	Docker Container	
Hazardous Locations	ANSI/UL 121201 Class 1 Div. 2 - Haz. Loc, ATEX-114 Category 3G (Zone 2)		Web-based admin dashboard, expandable with widgets	
			Cloud-based Firewall Management Software	
			High Availability (Configuration Synchronisation, Status Synchronisation, VRRP Virtual IPs), VLAN	
			Bash, Python Script Support	
			HiDiscovery	
			SNMPv3	
			CRON Jobs	
		License Model	UPnP & NAT-PMP	
			Setup Wizard	
			Editions: ESSENTIAL, ADVANCED, PRO	
			Free 30 days PRO Edition Test License	
			Software Subscriptions (3 years included, renewals: 1, 3, 5, 10 years)	

NOTE: These are the prominent technical specifications.
For complete technical specifications visit: www.belden.com

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