

# 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
Power Supply	1 x plug-in terminal block, 10-pin		IPsec (IKE v2), OpenVPN, WireGuard, WebVPN
Ambient Conditions		Routing	
Operating Temperature	-40°C to +70°C	Layer 3, Layer 2 Bridging	
Storage/Transport Temperature	-40°C to +85°C	Network Address Translation (NAT), SNAT, DNAT, BiNAT	
Relative Humidity (non-condensing)	5% to 95%	Dynamic Routing	
Protective Paint on PCB	No	OSPF, BGP	
Mechanical Construction		Interfaces	
Dimensions (W x H x D)	48 x 137 x 105 mm	Web UI, CLI, REST API, NETCONF, RESTCONF	
Mounting	DIN Rail 35 mm	Authentication	
Enclosure	Aluminum with DIN clip		Identity Awareness (User Identification)
Weight	613 g		802.1x Authentication
Protection Class	IP30		Multi-Factor Authentication (MFA)
Approvals			Password Quality Detection
Basis Standard	CE, FCC	Captive Portal	
Safety	UL 61010	Logging	
Hazardous Locations	ANSI/UL 121201 Class 1 Div. 2 - Haz. Loc, ATEX-114 Category 3G (Zone 2)	Support Tools	
		Ping, ARPing, Traceroute, Top, Iftop, TCPDump, LLDP, Filemanager, Factory Defaults, Backup & Restore, Restart	
		Protocols	
		IPv4, IPv6, NTP, VRRP, SNMPv3, PPPoE, DHCP, DNS, DynDNS, SSH, SSL	
		Identity Provider (IdP) Support	
		RADIUS, LDAP	
		Application Support and Management	
		Docker Container	
		Management	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
			UPnP & NAT-PMP
			Setup Wizard
			License Model
		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](http://www.belden.com)

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## About Belden

Belden Inc. delivers complete connection solutions that unlock untold possibilities for our customers, their customers and the world. We advance ideas and technologies that enable a safer, smarter and more prosperous future. Throughout our 120+ year history we have evolved as a company, but our purpose remains – making connections. By connecting people, information and ideas, we make it possible. We are headquartered in St. Louis and have manufacturing capabilities in North America, Europe, Asia and Africa.

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