

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.

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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	II .	Software	
Туре	IAF-240	Firmware	Belden OS
Description	Belden Industrial Firewall		Intrusion Detection & Prevention (IDS/IPS)
Port Type and Quantity	4 x GbE RJ45 ports		Web Application Firewall (WAF) Deep Packet Inspection (AMP, DNP3, EtherNet/IP, IEC 61850
Port Speeds	10/100/1000 Mbps RJ45		GOOSE, IEC104, Modbus TCP, OPC, Siemens S7 and S7 Plus)
More Interfaces			Anti-Malware
	1LICD 0.0 m - mt	Security	Web Filtering / Blacklisting
JSB Interface	1 x USB 2.0 port		Stateful Packet Inspection Firewall (Packet Filtering, Port Filterin
Serial Interface	1 x RJ45 port (RS232/422/485)		Firewall Learning Mode
Hardware			Access Control Lists
CPU	NXP i.MX 8M Mini ARMv8 64-bit		Certification Management
	Cortex-A53 @ 1.6 GHz (quad core)		Let's Encrypt Support
Encryption	TPM 2.0 (Hardware based anti- counterfeit, anti-tamper chip)		Network Objects
Memory	LPDDR4 4 GB		Application Control
•			eXpress Data Path
Storage	64 GB eMMC storage	VPN	IPsec (IKE v2), OpenVPN, WireGuard, WebVPN
Power Requiremen	ts	Routing	Layer 3, Layer 2 Bridging
Operating Voltage	Dual 12 - 24 V DC		Network Address Translation (NAT), SNAT, DNAT, BiNAT
Sperating voltage	Doct 12 24 v DC	Dynamic Routing	OSPF, BGP
Power	2.5 - 12 W	Interfaces	Web UI, CLI, REST API, NETCONF, RESTCONF
Consumption		Authentication	Identity Awareness (User Identification)
Power Supply	1 x plug-in terminal block, 10-pin		802.1x Authentication
			Multi-Factor Authentication (MFA)
Ambient Conditions			Password Quality Detection
Operating	-40°C to +70°C		Captive Portal
Temperature		Support Tools	Logging
Storage/Transport Temperature	-40°C to +85°C		Ping, ARPing, Traceroute, Top, Iftop, TCPDump, LLDP, Filemanage Factory Defaults, Backup & Restore, Restart
Relative Humidity (non- condensing)	5% to 95%	Protocols	IPv4, IPv6, NTP, VRRP, SNMPv3, PPPoE, DHCP, DNS, DynDNS, SSH, SSL
Protective Paint on PCB	No	Identity Provider (IdP) Support	RADIUS, LDAP
Mechanical Construction			
Dimensions W x H x D)	48 × 137 × 105 mm	Application Support and Management	Docker Container
Mounting	DIN Rail 35 mm		Web-based admin dashboard, expandable with widgets
Enclosure	Aluminum with DIN clip	[[Cloud-based Firewall Management Software
	613 g		High Availability (Configuration Synchronisation, Status
Protection Class	IP30		Synchronisation, VRRP Virtual IPs), VLAN
	11 00	Management	Bash, Python Script Support
Approvals		wanagement	Quality of Service (QoS)
Basis Standard	CE, FCC		SNMPv3 CRON Jobs
Safety	UL 61010		UPnP & NAT-PMP
Hazardous	ANSI/UL 121201 Class 1 Div. 2 - Haz.		Setup Wizard
Locations	Loc, ATEX-114 Category 3G (Zone 2)		Editions: ESSENTIAL, ADVANCED, PRO
		License Model	
OTF TI	minent technical specifications.		Free 30 days PRO Edition Test License



Connect to what's possible.



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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