



Industrial Access Point

High-performance WLAN
for industrial automation
and warehousing & logistics

Product Bulletin



Belden's Industrial Access Point delivers high-capacity, low-latency WLAN with dual-band concurrent 5 GHz/6 GHz support and advanced Wi-Fi 7 performance—ideal for robotics and smart factory automation.

- **Maximize flexibility** with the new 6 GHz channels that provide 10X more capacity than 5 GHz, higher radio quality and easier access to exclusive channels.
- **Support legacy migration** with dual-band concurrent (at the same time) design with 5 GHz to support older equipment and 6 GHz to expand capacity and add newer devices.
- **Reduce total cost of ownership** with an internal 100° sector antenna design that streamlines installation and push-pull connectors for fast, watertight connections.



Key Features

- Wi-Fi 7, 2 x 2 MIMO
 - » **Variant 1:** External antenna, 5 GHz only, push-pull QLS
 - » **Variant 2*:** Internal antenna, 5 and 6 GHz at the same time
- 5 GHz and 6 GHz bands
 - » Dual band concurrent: both bands at the same time
- 1 Gbps Ethernet, M12
- 9-36 V DC power or PoE+ powered
- Relay for switching up to 60 W
- IP65 waterproof for indoor use

Belden's Industrial Access Point

enables high-speed, low-latency wireless connectivity across complex industrial environments, supporting Wi-Fi 7 and dual-concurrent 5 GHz/6 GHz for reliable, scalable communication to unlock new possibilities.

* Variant 2 available in Q1 2026



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Your Benefits

Belden's Industrial Access Point with 6 GHz support offers up to 60 interference-free channels—10× more than 5 GHz—enabling deterministic, low-latency wireless for safety-critical applications such as robotics, automation and logistics. This industrial-grade device features dual-concurrent 5 GHz/6 GHz operation that supports legacy and new devices and helps disparate systems work in harmony.

With the access point, you get fast roaming that ensures seamless connections and minimal downtime. Built-in diagnostics and expert guidance help overcome Wi-Fi network congestion to deliver high-performance, future-ready industrial connectivity.

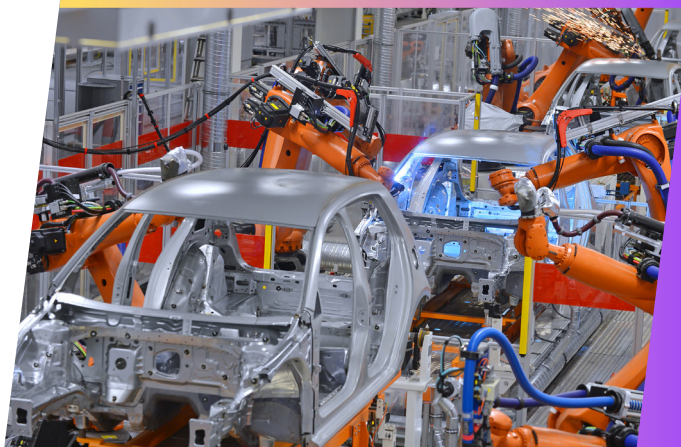
Applications

Belden's Industrial Access Point powers the shift to autonomous operations in complex manufacturing and warehousing and logistics environments. With revolutionary 6 GHz support, it boosts capacity from 500 to 5,000 robots per facility—ideal for high-density automation. Fast, interference-free roaming ensures seamless performance across the factory or warehouse floor. With the internal sector antenna, optimal targeted coverage can be achieved even with wall-mounting compared to traditional ceiling installations.

Purpose-built for industrial demands, these access points deliver the reliability, scalability and real-time communication needed to drive next-generation efficiency. Pairing with Belden's [ProLinx Edge Mini \(ELXM\)](#), a fast-roaming client device for mobile applications, delivers a complete connection solution.

Markets

Optimized for material handling and discrete manufacturing, Belden's Industrial Access Points meet the needs of high-density, high-mobility environments. Developed in accordance with Belden's Secure Development Lifecycle and compliant with Federal Communications Commission (FCC) and European Telecommunications Standards Institute (ETSI) requirements, these access points provide reliable, industrial-grade performance in demanding conditions.



Belden Industrial Access Point - IGX



Technical Information		IGX with integrated sector antenna	IGX with external QLS watertight antenna
Product Description			
Type	Industrial Access Point - IGX		
Description	Belden Wireless Industrial Access Point for Infrastructure WLAN with Wi-Fi 7. The rugged water-tight design is used for indoor deployments in Warehouses and Factories. Dual-band operation in 5 GHz and 6 GHz allows for maximum capacity and backward-compatibility in difficult WLAN applications with fast roaming.		
Port Type and Quantity	2 × 2 MIMO WLAN on 5 GHz and 6 GHz at the same time; 1 × M12 (X-Coded) Gigabit Ethernet (powered by PoE); 1 × M12 (L-Coded) Power (24 V DC) and Relay Output		
Radio Technology (WLAN)			
Radio Standard	IEEE 802.11be, ax, n WLAN interface; 2 x 2 MIMO		
Antenna Connector	External Antenna Variant: 2 × QLS (female, QMA-compatible); Internal Antenna Variant: Internal 2 × 2 MIMO 100° Sector Antenna		
Frequency Band	5 GHz and 6 GHz WLAN bands (depending on regulatory region and antenna variant)		
Radio Topology	WLAN Access Point supporting fast roaming 802.11r/k/v		
Encryption	WPA2 and WPA3 in both Private and Enterprise modes		
Interfaces			
Ethernet	M12, X-coded, 10/100/1000 Mbit/s		
Power	M12, L-coded, combined with Relay Output (up to 2 A/60 W)		
Power Requirements			
Operating Voltage	9–36 V DC over Power; PoE+ over Ethernet		
Ambient Conditions			
Operation Temperature	-20 °C to +65 °C		
Storage/Transport Temp.	-40 °C to +75 °C		
Environment	Indoor		
Mechanical Construction			
Dimensions (W x H x D)	200 × 135 × 40 mm		
Mounting	Wall mounting		
Protection Class	IP65		

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



Belden Industrial Access Point - IGX



Configurator			IGX with integrated sector antenna	IGX with external QLS watertight antenna
Characteristic	Attribute value	Description		
Product	IGX-	Industrial Access Point		
Regulatory Certifications	EU	Europe		
	US	USA / Canada		
	IN	India		
	KR	Korea		
	JP	Japan		
	XA..XZ	Custom Multi-Country Groups		
Wireless Module 1	71	WiFi 7 2 × 2 DBDC		
Antenna Connector	Q	QLS (Female) Watertight (External)		
	A	Integrated Sector Antenna		
Ethernet	1M	1x Gigabit M12		
Extension	D1	1x Relay		
Power Supply	G	9-36 V DC, PoE+		
Temperature Range	G	-20 °C to +65 °C		



Industrial Access Point

The internal antenna variant (left) allows to easily cover the area in front of the device for 5 GHz and 6 GHz deployments.

The external antenna variant (right) allows for optimized 5 GHz deployments.



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