Data Center Solutions

Helping you build faster, scale smarter and stay ahead of what's next.

Connect to what's possible.

Belden

More than connectivity.
Complete solutions for every
space in your data center.

Current market trends

The data center industry is changing faster than at any point in its history. AI-driven workloads are pushing infrastructure demands to levels that were hard to imagine just a few years ago, and the systems needed to support them are growing more complex by the month. Power demands are surging. Skilled labor is scarce. And operators are under pressure to deploy faster while managing tighter budgets and evolving compliance requirements.

These aren't future challenges. They're happening now. And solving them requires more than better products. It takes a partner who understands how all the systems in a data center work together.

How Belden addresses these challenges

Belden brings decades of experience securing and connecting critical infrastructure in demanding environments. As modern data centers adopt the same advanced automation, industrial networking and operational technology that have long driven industries like energy, manufacturing and transit, we're uniquely positioned to help.

We don't just sell components. We design, configure and deliver integrated solutions that span your entire facility. And because we own the brands that cover networking, automation, connectivity, cybersecurity and physical infrastructure, we can work across systems in ways that single-category vendors can't.

Key stats:

2x
Global data center power demand projected to more than double by 2030[1]

3x
Global data center capacity demand expected to nearly triple by 2030[2]

65%
of data center operators worldwide report difficulty finding or retaining skilled talent[3]

44%
of all data center power will be consumed by AI workloads by 2030, up from 21% today[4]

1. IEA, "Energy and AI" (April 2025)
2. McKinsey, "The cost of compute" (April 2025)
3. Uptime Institute Global Data Center Survey (July 2025; 800+ respondents, global)
4. Gartner (November 2025)

Infrastructure optimization

Traditional data center design allocates substantial space to non-revenue-generating infrastructure. Belden's approach to infrastructure optimization right-sizes support systems, reclaims valuable production space and accelerates deployment with modular, pre-configured designs that ship ready to install.

Control systems optimization

AI workloads generate significantly more heat than traditional data center equipment, and a communication breakdown between cooling subsystems can lead to equipment damage within minutes. Belden delivers resilient control networks for cooling and power systems with protocol compatibility across major automation platforms and recovery times that prevent thermal runaway.

Comprehensive infrastructure solutions

Belden delivers integrated infrastructure solutions that help you go live faster, reduce complexity and maximize your return on investment. Our portfolio spans secure networking and connectivity across operational networks, including wireline, wireless, cybersecurity, asset management and zero-trust architectures.

⟫ Biometric & security

Protect your facility at every layer with integrated solutions for physical access control, video surveillance, intrusion detection and network-level cybersecurity, including macmon Network Access Control (NAC).

⟫ Facilities management systems

Connect building management, fire alarm, lighting, HVAC and other campus systems safely and reliably. Our OT expertise helps tie facility-wide systems together without creating security vulnerabilities or putting uptime at risk.

⟫ Asset optimization

Gain real-time visibility into your infrastructure with automated connectivity tracking, environmental monitoring and capacity planning tools that reduce manual audits and the risk of misconfigurations.

⟫ Thermal management

Keep cooling and power systems resilient with vendor-agnostic automation and control solutions. Pre-configured panels support rapid deployment with protocol compatibility and redundant network architectures.

⟫ Rack power distribution units

Start with a strong foundation. Our cabinets and racks support integrated power distribution, thermal management, access control and cable management in a single, configurable platform. Manufactured in the U.S. with regional sourcing available worldwide.

⟫ Fiber & copper connectivity

Build the physical layer for high-density and AI-ready environments with end-to-end fiber and copper systems. Pre-terminated solutions accelerate deployment, and smaller-diameter cables improve airflow and pathway capacity.

⟫ Automation solutions

Bring industrial-grade networking and control to your data center. ProSoft Technology gateways enable protocol translation across vendors. Hirschmann networking delivers redundancy and deterministic performance.

Understanding Belden's data center portfolio

Belden empowers people and organizations to support in-building and across-campus data centers through industry-leading copper and fiber infrastructure solutions.

From turnkey compute and storage requirements to customized enterprise and industrial infrastructure requirements, Belden data center solutions seamlessly integrate functional areas while delivering on scalability, sustainability, industry compliance and cybersecurity requirements.

Data Center Areas	Systems	ISP/OSP Cabling & Connectivity	Racks & Enclsoures	Hirschmann Wired Networking	Lumberg Automation Network I/O & Connectivity	ProSoft & NetModule Gateways and Wireless	macmon NAC & SDP	CloudRail Cloud-Based Device Management	Thinklogical
White Space (Core Value Added)	Network Access Control	Y	Y						
	Computer	Y	Y						
	Storage	Y	Y						
	Cabinet Level Power		Y	Y	Y	Y	Y	Y	
	Cabinet Level Heat Rejection		Y	Y	Y	Y	Y	Y	
	Cabinet Level Access Control & Monitoring	y	Y	Y	Y	Y	Y	Y	Y
White Space (Support Systems)	Sensors	Y		Y	Y	Y	Y		
	Access Control	Y	Y	Y			Y		
	Security	Y	Y	Y			Y	Y	
	VESDA			Y			Y		
Administration Areas	Voice & Data	Y	Y						
	Command and Control	Y	Y	Y		Y		Y	Y
	Audio Visual	Y	Y						
	Guest WiFi	Y				Y		Y	
	Intelligent Lighting	Y			Y		Y		
Facilities (Power & Cooling)	Public Utilities Interface	Y		Y	Y	Y	Y	Y	Y
	Central Utilities Interface	Y	Y	Y	Y	Y	Y	Y	Y
	Power Distribution			Y	Y		Y		
	Standby & UPS Power			Y	Y		Y		
	ATS & Battery Systems			Y	Y		Y		
	Primary Heat Rejection			Y	Y		Y		
	Building HVAC			Y	Y		Y		
	Primary & Secondary Loops			Y	Y		Y		
	CDUs & White Space Heat Rejection			Y	Y		Y		
	Pumps and Piping			Y	Y		Y		
	Monitoring	Y	Y	Y	Y	Y	Y	Y	
	Predictive Maintenance and Supply	Y	Y	Y	Y	Y	Y	Y	
Campus & Building Infrastructure	Fire Alarm	Y		Y		Y	Y	Y	
	Monitoring	Y	Y	Y	Y	Y	Y	Y	
	Security (CCTV, Perimeter Security, Surveillance & Sensors)	Y	Y	Y	Y	Y	Y		
	Access (Control, Gate, Parking Control & Load Mgmt.)	Y	Y	Y	Y	Y	Y	Y	Y
	RAN (WiFi, DAS, NFC, etc.)	Y		Y		Y			
	Public Address	Y						Y	
	BMS, FMS & DCIM	Y	Y	Y	Y	Y	Y	Y	
	Signage and Wayfinding	Y		Y			Y		
	Utility Mgmt. (Central Utilities & Fuel Mgmt..)	Y	Y	Y	Y	Y	Y	Y	Y
	Environmental Monitoring	Y	Y	Y	Y	Y	Y		

Make your digital journey simpler, smarter and more secure

Through our global system of Customer Innovation Centers, Belden helps you break down data silo barriers and create a single converged network so you can share data seamlessly and securely for improved visibility and completely integrated experiences.

We work alongside you to identify your biggest challenges, design a tailored solution to meet your operational goals and maintain cost-efficiency along the way. Think of them as a testing ground for your vision of the future, a place where you can:

- See first-hand whether certain solutions will work together in your environment
- Compare systems, validate designs and gather benchmarks to improve performance
- Take your idea for a test drive to assess functionality
- Verify that your idea can become a real solution and deliver the benefits you expect

Committed to creating a more connected, responsible and sustainable world for all

Data center sustainability is a balancing act: reducing waste without sacrificing resilience, futureproofing without over-provisioning and improving energy efficiency without impacting operations. Belden is dedicated to doing our part. We focus on limiting our environmental impact, supporting our communities and conducting business responsibly.

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.

For more information, visit us at:
belden.com/datacenters

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