

# **Data Center Solutions**

from the Rack Space to the Parking Space

### Meeting Critical Data Center Requirements

Managing cooling, power and density in a way that complements performance requirements is key to maximizing efficiency–no matter the type of data center.

Because Belden understands how these three factors influence and interact with one another, we can help you deploy the right blend of technologies perfectly tailored to you. Our collaborative approach focuses on goals, challenges and operational considerations first. From there, we discuss how to create an optimal solution that fits within your data center environment.

## Why Choose a Belden Data Center Solution?

Our partnership approach results in configurable systems that adapt to your specific data center projects: white space, operational areas, facilities management and core IT, Ethernet over IP (EoIP) and OT requirements for building controls, command and control, security and surveillance. Belden's continued innovation and agile support cater to evolving data centers.



### **Cost Reduction**

Belden reduces costs across your supply chain through standardization, negotiated pricing, delivery and reduced energy consumption.

### Ease of Use

Belden products are engineered to work together for peak performance. Our innovations are at the forefront of technology. When you are ready to upgrade, we'll be ready, too.

### **Configurable Solutions**

Let our team of professionals help you design the perfect fit for your data center with competitive pricing, fast creation and deployment, and compatibility with standard products for easy integration.



### System Uptime

Belden products are put through rigorous testing to ensure the highest quality. We back our quality with a 25-year product performance and labor warranty.



### **Space Utilization**

Belden's high-density solutions support more connections in less space. Our engineers design for maximum efficiency.



### **Physical Security**

Belden keeps security top of mind with physical security offerings that cover everything from cabinet-level to campus-wide needs, truly supporting data centers from the rack space to the parking space.

## **Global Footprint**

Belden has a global footprint with operations in North and South America, Europe, the Middle East and Asia Pacific to ensure that our in-house experts are available in an area near you.

Belden's global CICs (Customer Innovation Centers) are run by a multidisciplinary team of engineers and consultants who combine technology and vertical market expertise to simplify network complexity and accelerate business impact. They work alongside your team to learn about your business, and understand your processes to design and configure your data center.

### BELDEN



 Imbergautomation

 A BELDEN BRAND

### thinklogical.

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tripwire







# Understanding Belden's Data Center Portfolio

Solutions	Product Group (Brand)				
Networking	Cybersecurity & Firewalls (Tripwire & Hirschmann)				
	Ruggedized Wireless LAN (Hirschmann)				
	Ruggedized Switches (Hirschmann & GarretCom)				
	Secure KVM and Matrix Switching (Thinklogical)				
	Fiber Cabling Systems (Belden)				
	Category Cabling Systems (Belden)				
Connectivity	Instrumentation, Electronics and Controls Cabling (Belden)				
	Broadcast and Commercial Audio/Video Cabling (Belden)				
	Industrial Cabling Solutions (Belden)				
	Sensors, Actuators and IO Systems (Lumberg)				
	Racks, Enclosures and Cable Management (Belden)				
	Power Distribution Units (Belden)				
Infrastructure Support	Airflow Management and Containment (Belden)				
	Environmental Monitoring (Belden)				
	Security and Access Control (Belden)				
Custom &	Production & Proof of Concept Labs				
Collaborative	Customer Innovation Centers				
Solutions	Research, Development, Test & Evaluation				

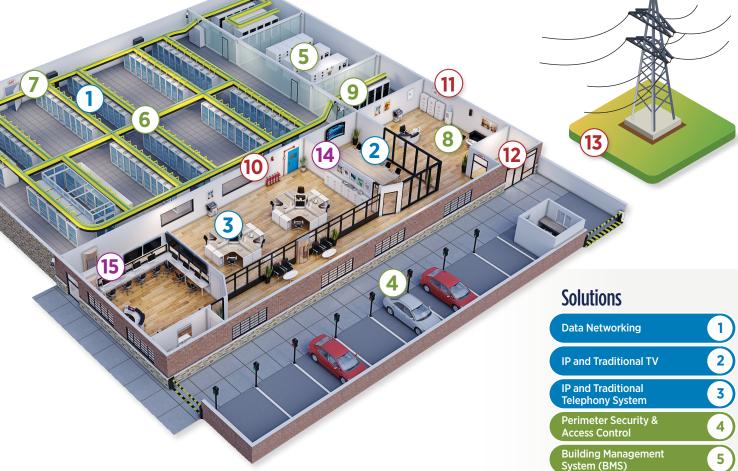


Belden empowers people and organizations to support in-building and across-campus data centers through industry-leading copper and fiber infrastructure solutions.

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	SECURITY/SAFE	TY/SURVEILLANCE	OPERATION	MANAGEMENT	AUDIO/VIDEO	COMMUNICATION
Networking	Operations Technologies (Data, Voice, Video)	Fire Alarm, Life Safety and Public Address	Security (Access, Surveillance & Monitoring)	Intelligent Building Services (IMS/BMS)	Data Center Infrastructure Management (DCIM)	Digital Signage & Wayfinding	Control & Command Center
Х	x	x	x	x	x	x	x
		х	Х	x	X	х	
					x		
Х	x		x		x	x	x
Х	x	Х	х	х		х	X
х	x	х	х	х		х	х
	x	x	x	x	x		х
х	x	x	x	x	x	x	
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Х	х	x	х	х	x	х	Х

# Data Center Solutions from the Rack Space to the Parking Space



Belden understands the unique demands that are being placed on your data center. That's why we offer a complete portfolio of innovative cabling and connectivity solutions designed to ensure fast, reliable transmission for ever-increasing amounts of data.

From the rack space to the parking space, Belden's data center solutions are designed for every corner of your data center—whether it's a colocation, edge, enterprise, hyperscale or containerized facility.

Data Networking	<b>U</b>
IP and Traditional TV	2
IP and Traditional Telephony System	3
Perimeter Security & Access Control	4
Building Management System (BMS)	5
Data Center Infrastructure Management (DCIM)	6
Heating, Ventilation and Air-Conditioning (HVAC)	7
Intelligent Lighting Control	8
Power Management System (PMS)	9
	9 10
System (PMS)	
System (PMS) Fire Alarm Public Address & General	10
System (PMS) Fire Alarm Public Address & General Alarm (PA/GA)	10
System (PMS) Fire Alarm Public Address & General Alarm (PA/GA) Access Control	10 11 12
System (PMS) Fire Alarm Public Address & General Alarm (PA/GA) Access Control CCTV – Indoor & Outdoor	10 11 12 13



### NETWORK INFRASTRUCTURE

### 123

#### **HIGH-SPEED PRODUCTS**

- A direct-attach cable (DAC) is used to connect one mobility access switch to another while forming a stack.
- Belden offers a full range of DAC, AOC and transceivers that meet data center requirements for today and tomorrow.

#### NETWORK INFRASTRUCTURE

- For high-performance communication, Belden offers copper and fiber patch panels in a variety of options, such as REVConnect<sup>®</sup> high-density patch panels offering 50% faster terminations with maximum flexibility.
- Belden's fiber solutions are built for easy installation, to handle various density requirements and to support simple and on-demand scalability.
- Copper field-terminated and pre-terminated end-to-end systems offer the quickest termination/deployment time in the industry.

### OPERATIONS MANAGEMENT 4 5 6 7 8 9

#### **BUILDING MANAGEMENT SYSTEM (BMS)**

- BMS is the computerized measurement, control and management of building services in a facility.
- Belden supports accommodation for devices/sensors/systems that rely on both legacy protocols and newer IP based communications, e.g. IoT.
- PoE-enabling cable & connectivity solutions supporting devices with up to 100W of power for devices.
- REVConnect<sup>®</sup> for BMS direct field termination which supports up to CAT6A connectivity and 100W PoE.

#### **OT SWITCHES**

- Belden's Hirschmann switches support PoE/PoE+ function and power supply will not be interrupted during device rebooting.
- Monitoring and visualizing your network is made easy with the use of our Industrial HiVision network management software.
- Ideal choice for all IoT applications.

### SECURITY/SAFETY/SURVEILLANCE 10 11 12 1

#### **CCTV SURVEILLANCE SYSTEM**

- Belden offers integration support for CCTV systems to converge with other facility devices in order to automatically identify threats and send alerts.
- PoE solutions that enable cable and connectivity to support devices with up to 100W of power for indoor and outdoor surveillance.
- REVConnect supports signaling and power solutions for CCTV systems in white, gray and outside spaces.

#### ACCESS CONTROL

- Selective restriction of access for certain doors and facilities based on system parameters.
- Belden offers reliable and easy-to-install cabling to support bandwidth and power requirements of access control systems for data transfer and management.

#### FIRE ALARM SYSTEM

- Designed to detect unwanted presence of fire by monitoring environmental changes. In the event of an emergency, the system provides a visual alert for the occupants to escape safely.
- Belden offers connectivity that allows fire alarms and mass notification systems to display safety alerts and updates.
- Belden solutions meet different local and international alarm standards for different regions.

### AUDIO/VIDEO COMMUNICATION

#### **DIGITAL SIGNAGE**

• Video extenders and matrix switches from Thinklogical deliver video-rich information where it is needed most.

#### **COMMAND & CONTROL VISUALIZATION SYSTEM**

• Thinklogical command and control systems ensure maximum operations center performance, flexibility and uptime.

### CONTACT A BELDEN DATA CENTER SOLUTIONS EXPERT TODAY.

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