BELDEN
SENDING ALL THE RIGHT SIGNALS®

Belden Security Solutions

**Security Solutions for
Perimeter Monitoring,
Life Safety and
Access Control**

FIRE

FIRE

One Enterprise.
One Infrastructure.
One Partner.

Featured Brands

BELDEN

GarrettCom®
A **BELDEN** BRAND

Belden is a trusted advisor for network infrastructures, audio/visual and building automation systems deployment, with a standards-compliant product portfolio that spans the entire security application range. Belden is a leader in the physical security space and knows how to integrate the security system into your overall infrastructure strategy for maximum effectiveness and value.

Converging Security with IP Networking

Having up-to-date security and surveillance strategies and processes in place for keeping people, property, and information safe and secure is a must-have for all businesses. One of the keys to protecting these valuable assets is leveraging the many benefits of a converged infrastructure. With a converged infrastructure, businesses can maximize their IP investment, improve manageability and usability, and ease deployment and serviceability — all while providing a single-pane-of-glass view into a facility's operation, whether it's for one building, a campus, or multiple locations around the globe.

The Belden Difference

Belden can offer you a complete solution that spans our portfolio of networking and cabling solutions offerings to integrate your perimeter monitoring, life safety and access control applications onto a common infrastructure. Together with its vast partner network, Belden can integrate your motion detectors, cameras, video monitors, card-access readers, electronic door controls and alarm systems to aggregate information on digital recording systems. Belden can help you achieve a sophisticated security infrastructure that will serve you today and tomorrow by meeting these challenges:

- **Scalability:** Your security infrastructure can grow with you, allowing upgrades to new technologies while still utilizing the current infrastructure. A single security network can span multiple buildings, an entire campus or even global operations.

- **Integration:** Go beyond discrete and separated security islands by integrating your disparate or proprietary security systems onto a common IP-based digital infrastructure. Integrate with your Enterprise network to enhance communications and provide the data for evaluating security.

Global Presence · Application Expertise · Global Network of Distributors and Certified Installers · Industry-Leading Warranties · System Minded for Development and Delivery · Solutions for Analog, Digital and IP Systems · Hardened Ethernet Hubs, PoE and Media Converters · Comprehensive Cable and Connectivity Portfolio · Belden Security Solutions

- **Bandwidth:** Achieve sufficient bandwidth to avoid transmission bottlenecks that degrade effectiveness. Capture, view, and record high-definition video.

- **Distance:** Belden's portfolio includes multiple media types enabling IP networks to cover longer distances for perimeter and campus security.

- **Interoperability:** Belden IP networks provide an infrastructure that supports the widest range of security equipment, allowing you to specify video, access, alarms, and other systems from a wide range of vendors.

- **Environment:** Belden trusted brands allow a common network to be deployed across all environments, including the most demanding areas such as the factory floor, parking lot or perimeter fencing.
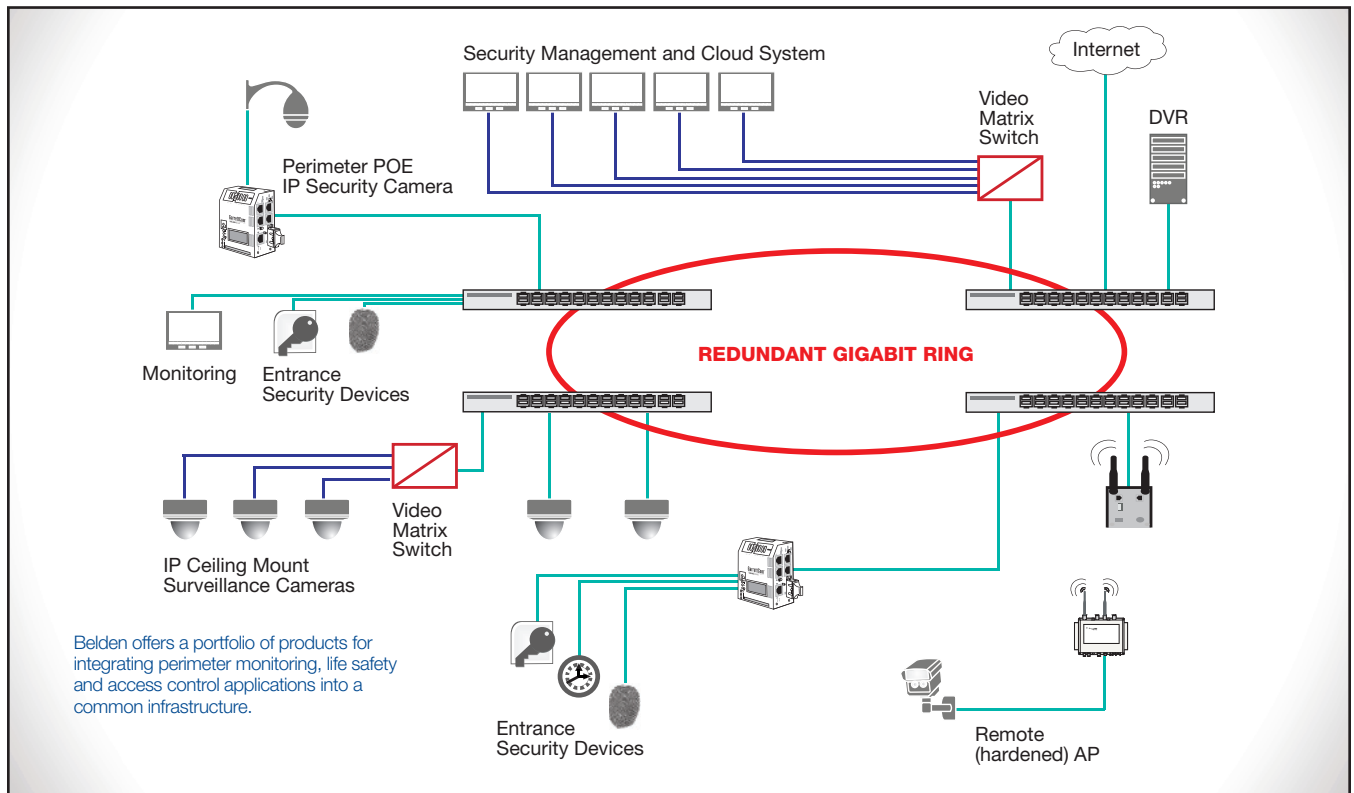
**From Legacy Analog to the Latest IP-Based Systems,
Belden Has the Answer to your Security Application Needs**

One Enterprise.
One Infrastructure.
One Partner.

Belden Security Offering

Security Management and Cloud System

Internet

Perimeter POE
IP Security Camera

Video
Matrix
Switch

DVR

Monitoring

Entrance
Security Devices

REDUNDANT GIGABIT RING

Video
Matrix
Switch

IP Ceiling Mount
Surveillance Cameras

Belden offers a portfolio of products for
integrating perimeter monitoring, life safety
and access control applications into a
common infrastructure.

Entrance
Security Devices

Remote
(hardened) AP

APPLICATIONS

PRODUCTS	Intrusion Detection and Notification	Analog & Digital Video Surveillance / Monitoring	Access Control & Event Notification – Building/Room	Access Control & Event Notification – Rack	Fire Detection & Alarm	Mass Notification	Data and Voice Communications
Copper Cabling Systems	●	●	●	●	●	●	●
Fiber Cables & Connectivity	●	●					●
Hardened Switches	●	●				●	
Media Converters		●					
Racks and Enclosures		●		●			●
Coaxial Cables & Connectivity	●	●	●	●	●		
Industrial-Grade Cabling Systems	●	●					●

Belden is Your One Source for the Complete Infrastructure

Providing the best security at the lowest cost goes beyond purchase costs. Belden solutions can provide you higher reliability, simplified infrastructure, easier management, and longer lifecycles, all aimed at lowering your total cost of ownership.

Using Belden for your security infrastructure can not only reduce installation costs and speed system commissioning, it can also eliminate the headaches that often come with using multiple vendors. Belden's trained and certified installers can design, install and troubleshoot your system. And since the security infrastructure typically has a longer life than the security devices, you have the peace of mind of knowing it has the flexibility, reliability and high bandwidth to meet the needs of next-generation applications.

Belden Security Solutions save valuable time and resources by expertly addressing all infrastructure needs and provide an overall network instead of disparate products. This will lower operating costs by reducing time to troubleshoot, easing maintenance requirements, and increasing uptime. Belden has the experience to guide you on convergence, scalability, and consolidation so you get a more flexible system at lower costs.

Solutions for Analog and Digital

Whatever your cabling solution needs—from traditional multi-conductor and communication cables and connectors for analog applications to copper and fiber offerings for digital networks—Belden has products engineered for easier use and higher performance.

Belden products can also support all your security video applications, from those using the H.264/MPEG-4 AV codec standard for video compression to streaming video.

Beyond Cable to End-to-End Solutions

Nobody offers a broader range of infrastructure products than Belden. Our line includes cable, connectivity, racks, enclosures and management hardware to support any security application from legacy analog equipment to the latest IP-based systems.

Our GarrettCom industrial networking products combine the ruggedness you need for use in outdoor applications or in other demanding environments. All with advanced networking performance and easy integration into your enterprise network.

Belden Cabling Solutions

- Fiber, category, coaxial, multi-conductor and multi-pair cables
- Connectivity

GarrettCom Ethernet Devices

- Rugged hubs, switches and PoE for harsh environments

Belden Security Portfolio

Belden Cable Management Solutions

- Racks and Enclosures
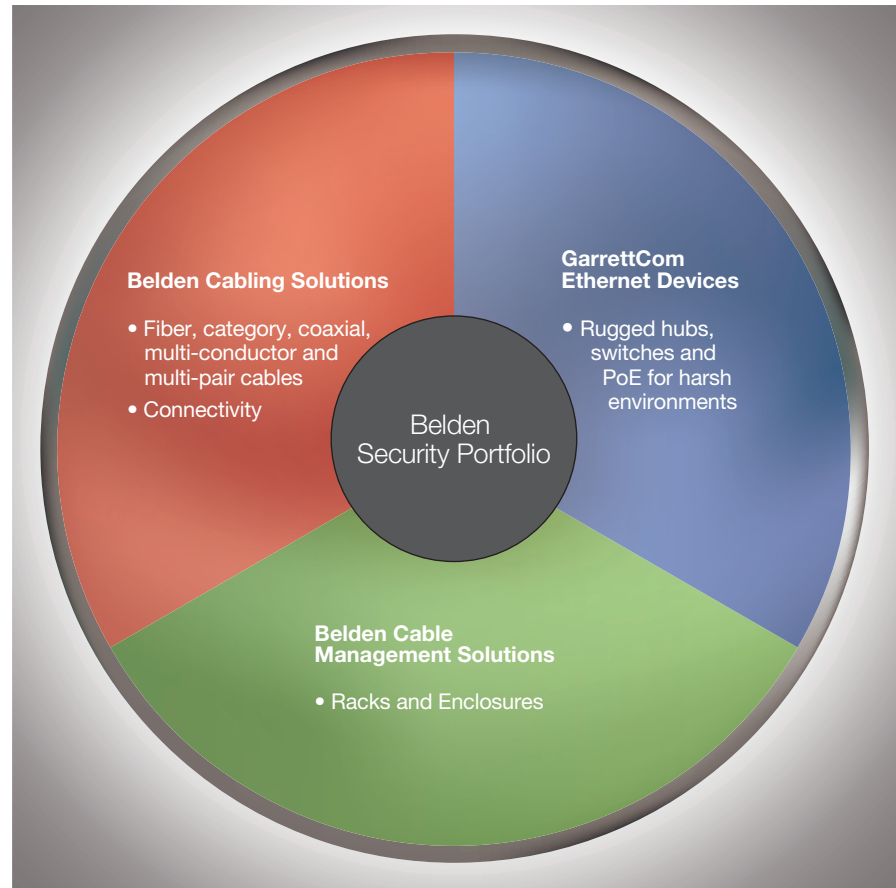
Rely on the Expertise of Belden

Belden is a trusted advisor for network infrastructures, audio/visual and building automation systems deployment, with a product portfolio that spans the entire range of applications. Belden knows security, and knows how to integrate the security system into your overall infrastructure strategy for maximum effectiveness and value. Belden offers the highest quality solutions backed by an industry-leading warranty.

From planning to post-installation support, working with Belden for your security infrastructure systems means fewer hassles, and reliable solutions which are delivered efficiently through our network of authorized distributors and certified installers, who understand security requirements and know Belden products. With our global presence, Belden can support you whether you have a single location or facilities worldwide;

you can standardize your solutions, knowing they can be applied everywhere you operate.

Connectivity for Ethernet/IP Networks

Belden has the widest range of copper and fiber-optic cable for Ethernet/IP networking. Whether you need Enterprise-grade cable for indoor use or rugged cable for outdoor and harsh environments, we have the solution you need. As a leader in Enterprise network connectivity, we offer a full line of high-performance cables, connectors, and management products.

Contact Belden Today to Learn More!

For more information on Belden Security Solutions, please call **1.800.BELDEN.1** (1.800.235.3361) or visit **www.belden.com**

One Enterprise.
One Infrastructure.
One Partner.

Offering a Complete Line of High-Performance Security Solutions

Featured on the following pages is technical information on Belden's line of high-performance security solutions. Included in the line are fiber, category, coaxial, multi-conductor and multi-pair cables, connectors, racks and enclosures, hubs, switches and more. For more information on these products, visit **www.belden.com**.

Copper Cabling Solutions

- UTP cables provide both signal transmission and PoE capabilities in a single cable, eliminating the need for an external power source

- Patented Bonded-Pair construction – a unique advantage ensuring consistently high Installable Performance® both before and after installation

- Lower attenuation ensures stronger signal power

- Available in Spool-in-Box packaging for ease of installation, handling, and inventory management

- Full range of Connectors, Cords, Panels, Racks & Enclosures and Cable Management

CAT5E (TIA/EIA Category 5e LAN)

CAT5E KeyConnect Modular Jacks

Color	Belden Part Number
White	AX101309
Black	AX101310
Red	AX104183
Blue	AX104186
Purple	AX104187

A broad range of dark and pastel colors are also available

CAT5E KeyConnect Patch Panels

Description	Belden Part Number
HD-110, 24-Port, 1U*	AX103258
HD-110, 48-Port, 2U*	AX103259
AngleFlex, 24-Port, 1U**	AX103248
AngleFlex, 48-Port, 2U**	AX103249
KeyConnect, 24-Port, 1U**	AX103114
KeyConnect, 48-Port, 1U**	AX103121
KeyConnect, 48-Port, 2U**	AX103115

*Preloaded; **Modular patch panels

CAT5E Patch Cords (Bonded-Pairs CMR)

Description	Belden Part Number			
	Black	Blue	Gray	White
2 ft. (0.6 m)	C501100002	C501106002	C501108002	C501109002
4 ft. (1.2 m)	C501100004	C501106004	C501108004	C501109004
7 ft. (2.1 m)	C501100007	C501106007	C501108007	C501109007
10 ft. (3.0 m)	C501100010	C501106010	C501108010	C501109010
15 ft. (4.6 m)	C501100015	C501106015	C501108015	C501109015

Other lengths and colors available

CAT5E Horizontal Cables

Description	Bonded			Non-Bonded			
	Blue	White	Black	Blue	White	Gray	Black
Indoor Category 5e 350MHz (CMR)	1700A 006U1000	1700A 009U1000	1700A 010U1000	1212 006U1000	1212 009U1000	1212 008U1000	1212 010U1000
Indoor Category 5e 350MHz (CMP)	1701A D15U1000	1701A 009U1000	1701A 010U1000	1213 D15U1000	1213 009U1000	1213 008U1000	1213 010U1000
Indoor Category 5e (CMR)	—	—	—	1583A 006U1000	1583A 009U1000	1583A 008U1000	1583A 010U1000
Indoor Category 5e (CMP)	—	—	—	1585A D15U1000	1585A 009U1000	1585A 008U1000	1585A 010U1000
Indoor/Outdoor Category 5e (CMR/CMX)	7918A 0061000	—	7918A 0101000	—	1594A 009U1000	1594A 008U1000	7923A 0101000
Indoor/Outdoor Category 5e (Waterblocked)	—	—	—	—	—	—	7934A 0101000
Indoor/Outdoor Category 5e Shielded (CMR/CMX)	7919A 0061000	—	—	—	—	—	7919A 0101000
Indoor/Outdoor Category 5e Shielded (Waterblocked)	—	—	—	—	—	—	7937A 0101000
Indoor/Outdoor Tactical Category 5e (Heavy Duty Jacket)	—	—	1304A B591000	—	—	—	—
Indoor/Outdoor Tactical Category 5e (Upjacketed)	—	—	1305A B591000	—	—	—	—

Other colors and put-ups available

Copper Cabling Solutions (continued)

CAT5E (TIA/EIA Category 5e LAN) (continued)

KeyConnect Faceplates

Description	Belden Part Number		
	Elec. White*	Stainless Steel*	Stainless Steel**
1-Port, Single Gang	AX102660	—	AX102006
2-Port, Single Gang	AX102655	AX104231	AX102007
4-Port, Single Gang	AX102249	AX104232	AX102009
6-Port, Single Gang	AX102251	AX104233	AX102010
4-Port, Double Gang	—	AX104479	AX102011
6-Port, Double Gang	AX102671	AX104480	AX102012
12-Port, Double Gang	AX102257	AX104234	AX102013
Wall Mount Phone Plates (No ID Window)	AX102902	—	AX104126
Single-gang Back Box, 1.89 in.	AX102657	—	—
Double-gang Back Box, 1.89 in.	AX104131	—	—

Other configurations (i.e. numbers of ports) available; * With ID window; ** Without ID window

CAT5E Shielded Cabling System

Description	Belden Part Number				
	Metallic	Blue	Gray	White	Black
DataTwist 1200, F/UTP, Non Plenum	—	1212F 0061000	1212F 0081000	1212F 0091000	1212F 0101000
DataTwist 1200, F/UTP, Plenum	—	1213F D151000	1213F 0081000	1213F 0091000	1213F 0101000
Shielded Modular Jack, Metallic	AX104595	—	—	—	—
Shielded Modular Patch Panel, 24-Port, 1U, Titanium (empty)	AX104563	—	—	—	—
Shielded Modular Patch Panel, 48-Port, 2U, Titanium (empty)	AX104564	—	—	—	—
2 ft (.6m), Shielded Patch Cord, 4-Pair, T568A/B-T568A/B, Non Plenum	—	C5F1106002	C5F1108002	C5F1109002	C5F1100002
4 ft (1.2m), Shielded Patch Cord, 4-Pair, T568A/B-T568A/B, Non Plenum	—	C5F1106004	C5F1108004	C5F1109004	C5F1100004
7 ft (2.1m), Shielded Patch Cord, 4-Pair, T568A/B-T568A/B, Non Plenum	—	C5F1106007	C5F1108007	C5F1109007	C5F1100007
15 ft (4.6m), Shielded Patch Cord, 4-Pair, T568A/B-T568A/B, Non Plenum	—	C5F1106015	C5F1108015	C5F1109015	C5F1100015
25 ft (7.6m), Shielded Patch Cord, 4-Pair, T568A/B-T568A/B, Non Plenum	—	C5F1106025	C5F1108025	C5F1109025	C5F1100025
15 ft (4.6m), Shielded Pigtails, 4-Pair, T568B-Open, Non Plenum	—	C5F1306015	C5F1308015	—	—
25 ft (7.6m), Shielded Pigtails, 4-Pair, T568B-Open, Non Plenum	—	C5F1306025	C5F1308025	—	—

Tools and Accessories

Description	Belden Part Number
Connecting Tool	AX100749
Termination Station	AX101852
Release Tool	AX101185
Cable Preparation Tool	1797B
Patch Cord Tool	AX102775
Velcro Cable Ties, 25 Per Roll, Black, 8 in	AX100783
Velcro Cable Ties, 25 Per Roll, Black, 12 in	AX100784
Wrap-Around Labels, Gray, 48 Labels/Sheet (25 sheets per pack)	AX101555
RJ45 Category 5e Non-Shielded Modular Plug w/50 Micron Gold Contact, Clear. Tool required CPRJ11-45.	HIPMP-RJ45
RJ45 Category 5e Shielded Modular Plug w/50 Micron Gold Contacts, Nickel. Tool required CPRJ11-45.	HIPMP-RJ45SH
Crimp and Strip Tool for RJ11 and RJ45	CPRJ11-45
Cable Strip Tool for Networking Cable	R301602 000S1
Strip and Crimp Tool for Modular Boots, Strain Relief, Crimpable Snagless Over Boot	SLS-RJ45CR

Copper Cabling Solutions (continued)

CAT6+ (TIA/EIA Category 6 LAN)

CAT6+ KeyConnect Modular Jacks

Color	Belden Part Number
White	AX101320
Black	AX101321
Red	AX104190
Blue	AX104193
Purple	AX104194

A broad range of dark and pastel colors are also available

CAT6+ KeyConnect Patch Panels

Description	Belden Part Number
KeyConnect, 24-Port, 1U*	AX103253
KeyConnect, 48-Port, 2U*	AX103255
AngleFlex, 24-Port, 1U**	AX103248
AngleFlex, 48-Port, 2U**	AX103249
KeyConnect, 24-Port, 1U**	AX103114
KeyConnect, 48-Port, 1U**	AX103121
KeyConnect, 48-Port, 2U**	AX103115

* Preloaded; ** Modular patch panels

CAT6+ Patch Cords (Bonded-Pairs CMR)

Description	Belden Part Number			
	Black	Blue	Gray	White
2 ft. (0.6 m)	C601100002	C601106002	C601108002	C601109002
4 ft. (1.2 m)	C601100004	C601106004	C601108004	C601109004
7 ft. (2.1 m)	C601100007	C601106007	C601108007	C601109007
10 ft. (3.0 m)	C601100010	C601106010	C601108010	C601109010
15 ft. (4.6 m)	C601100015	C601106015	C601108015	C601109015

Other lengths and colors available

CAT6+ DataTwist Horizontal Cables

Description	Bonded			Non-Bonded			
	Blue	White	Black	Blue	White	Gray	Black
3600 Category 6e - CMR	3632 006A1000	3632 009A1000	3632 010A1000	3612 006A1000	3612 009A1000	3612 008A1000	3612 010A1000
3600 Category 6e - CMP	3633 D15A1000	3633 009A1000	3633 010A1000	3613 D15A1000	3613 009A1000	3613 008A1000	3613 010A1000
2400 Category 6 - CMR	1872A 006A1000	1872A 009A1000	1872A 010A1000	2412 006A1000	2412 009A1000	2412 008A1000	2412 010A1000
2400 Category 6 - CMP	1874A D15A1000	1874A 009A1000	1874A 010A1000	2413 D15A1000	2413 009A1000	2413 008A1000	2413 010A1000

Other colors and put-ups available

3600 Pre-Terminated System

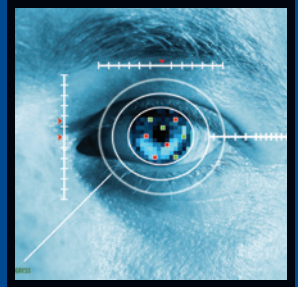| Cable Assembly*		KeyConnect Coupler Patch Panel (Preloaded)		Modular Coupler	
CMR, Black	C601106xxxA06	24-port, 1U, Titanium	AX104227	Black	AX104215
CMP, Black	C602106xxxA06	48-port, 2U, Titanium	AX104228		

* Use xxx to specify length in feet—006-050 ft in increments of 1 ft—055-265 ft in increments of 5 ft. Modular Panels also available.

KeyConnect Faceplates

Description	Belden Part Number		
	Elec. White*	Stainless Steel*	Stainless Steel**
1-Port, Single Gang	AX102660	—	AX102006
2-Port, Single Gang	AX102655	AX104231	AX102007
4-Port, Single Gang	AX102249	AX104232	AX102009
6-Port, Single Gang	AX102251	AX104233	AX102010
4-Port, Double Gang	—	AX104479	AX102011
6-Port, Double Gang	AX102671	AX104480	AX102012
12-Port, Double Gang	AX102257	AX104234	AX102013
Wall Mount Phone Plates (No ID Window)	AX102902	—	AX104126
Single-gang Back Box, 1.89 in.	AX102657	—	—
Double-gang Back Box, 1.89 in.	AX104131	—	—

Other configurations (i.e. numbers of ports) available; * With ID window; ** Without ID window

Copper Cabling Solutions (continued)

CAT6+ (TIA/EIA Category 6 LAN) (continued)

CAT6+ Shielded Cabling System

Description	Belden Part Number				
	Metallic	Blue	Gray	White	Black
DataTwist 2400, F/UTP, CMR	—	2412F 0061000	2412F 0081000	2412F 0091000	2412F 0101000
DataTwist 2400, F/UTP, CMP	—	2413F D151000	2413F 0081000	2413F 0091000	2413F 0101000
Shielded Modular Jack, Metallic	AX104596	—	—	—	—
Shielded Modular Patch Panel, 24-Port, 1U, Titanium (empty)	AX104563	—	—	—	—
Shielded Modular Patch Panel, 48-Port, 2U, Titanium (empty)	AX104564	—	—	—	—
2 ft (.6m), Shielded Patch Cord, 4-Pair, T568A/B-T568A/B, CMR	—	C6F1106002	C6F1108002	C6F1109002	C6F1100002
4 ft (1.2m), Shielded Patch Cord, 4-Pair, T568A/B-T568A/B, CMR	—	C6F1106004	C6F1108004	C6F1109004	C6F1100004
7 ft (2.1m), Shielded Patch Cord, 4-Pair, T568A/B-T568A/B, CMR	—	C6F1106007	C6F1108007	C6F1109007	C6F1100007
15 ft (4.6m), Shielded Patch Cord, 4-Pair, T568A/B-T568A/B, CMR	—	C6F1106015	C6F1108015	C6F1109015	C6F1100015
25 ft (7.6m), Shielded Patch Cord, 4-Pair, T568A/B-T568A/B, CMR	—	C6F1106025	C6F1108025	C6F1109025	C6F1100025
15 ft (4.6m), Shielded Pigtails, 4-Pair, T568B-Open, CMR	—	C6F1306015	C6F1308015	—	—
25 ft (7.6m), Shielded Pigtails, 4-Pair, T568B-Open, CMR	—	C6F1306025	C6F1308025	—	—

Tools and Accessories

Description	Belden Part Number
Connecting Tool	AX100749
Termination Station	AX101852
Release Tool	AX101185
Cable Preparation Tool	1797B
Patch Cord Tool	AX102775
Velcro Cable Ties, 25 Per Roll, Black, 8 in	AX100783
Velcro Cable Ties, 25 Per Roll, Black, 12 in	AX100784
Wrap-Around Labels, Gray, 48 Labels/Sheet (25 sheets per pack)	AX101555
RJ45 Category 6 Non-Shielded Modular Plug w/50 Micron Gold Contacts, Clear. Tool required CPRJ11-45.	HIPMP-RJ45CAT6
RJ45 Category 6 Shielded Modular Plug w/50 Micron Gold Contacts. Nickel. Tool required CPRJ11-45.	HIPMP-RJ45CAT6SH
RJ45 Category 6 Shielded Modular Plug w/Grounding Tabs, Nickel. Tool required CPRJ11-45.	HIPMP-RJ45CAT6GC
Crimp and Strip Tool for RJ11 and RJ45	CPRJ11-45
Cable Strip Tool for Networking Cable	R301602 000S1
Strip and Crimp Tool for Modular Boots, Strain Relief, Crimpable Snagless Over Boot	SLS-RJ45CR

Copper Cabling Solutions (continued)

10GX (TIA/EIA Category 6A LAN)

10GX KeyConnect Modular Jacks

Color	Belden Part Number
White	AX102282
Black	AX102283
Red	AX104153
Blue	AX104156
Purple	AX104157

A broad range of dark and pastel colors are also available

10GX KeyConnect Patch Panels

Description	Belden Part Number
KeyConnect, 24-Port, 1U*	AX103254
KeyConnect, 48-Port, 2U*	AX103256
AngleFlex, 24-Port, 1U**	AX103248
AngleFlex, 48-Port, 2U**	AX103249
KeyConnect, 24-Port, 1U**	AX103114
KeyConnect, 48-Port, 1U**	AX103121
KeyConnect, 48-Port, 2U**	AX103115

* Preloaded (Titanium); ** Modular patch panels

10GX Patch Cords (Bonded-Pairs CMR)

Description	Belden Part Number			
	Black	Blue	Gray	White
2 ft. (0.6 m)	CA21100002	CA21106002	CA21108002	CA21109002
4 ft. (1.2 m)	CA21100004	CA21106004	CA21108004	CA21109004
7 ft. (2.1 m)	CA21100007	CA21106007	CA21108007	CA21109007
10 ft. (3.0 m)	CA21100010	CA21106010	CA21108010	CA21109010
15 ft. (4.6 m)	CA21100015	CA21106015	CA21108015	CA21109015

Other lengths and colors available

10GX Horizontal Cables

Description	Belden Part Number				
	Bonded		Non-Bonded		
	Blue	White	Blue	White	Gray
10GX Category 6A - CMR	10GX32 0061000	10GX32 0091000	10GX12 0061000	10GX12 0091000	10GX12 0081000
10GX Category 6A - CMP	10GX33 D151000	10GX33 0091000	10GX13 D151000	10GX13 0091000	10GX13 0081000

Other colors available

10GX Pre-Terminated System

Cable Assembly*		KeyConnect Coupler Patch Panel (Preloaded)		Modular Coupler	
CMR, Black	CA21100xxxA06	24-port, 1U, Titanium	AX104141	Black	AX104024
CMP, Black	CA22100xxxA06	48-port, 2U, Titanium	AX104142		

* Use xxx to specify length in feet—006-050 ft in increments of 1 ft—055-265 ft in increments of 5 ft

KeyConnect Faceplates

Description	Belden Part Number		
	Elec. White*	Stainless Steel*	Stainless Steel**
1-Port, Single Gang	AX102660	—	AX102006
2-Port, Single Gang	AX102655	AX104231	AX102007
4-Port, Single Gang	AX102249	AX104232	AX102009
6-Port, Single Gang	AX102251	AX104233	AX102010
4-Port, Double Gang	—	AX104479	AX102011
6-Port, Double Gang	AX102671	AX104480	AX102012
12-Port, Double Gang	AX102257	AX104234	AX102013
Wall Mount Phone Plates (No ID Window)	AX102902	—	AX104126
Single-gang Back Box, 1.89 in.	AX102657	—	—
Double-gang Back Box, 1.89 in.	AX104131	—	—

Other configurations (i.e. numbers of ports) available; * With ID window; ** Without ID window

One Enterprise.
One Infrastructure.
One Partner.

Fiber-Optic Cabling Systems

- Plenum, riser, and LSZH ratings

- Single-mode OS2 and multimode OM1, OM2, OM3, and OM4 fibers

- Simplex and duplex constructions for equipment connections

- Tight buffer constructions for indoor and indoor outdoor applications, in-building backbone or horizontal deployment, low to high fiber count requirements and armored for industrial environments or rugged installations.

- Loose-tube constructions with up to 24 fibers per tube and multitube cables with up to 216 fibers

- Full range of Connectors, Cords, Panels, Racks & Enclosures and Cable Management

Fiber*Express* Brilliance Field-Installable Multimode Connectors

Description	Belden Part Number					
	Multimode, OM1, 62.5 μm		Multimode, OM2, 50 μm		Multimode, OM3/OM4, 50 μm	
	1 per package	25 per package	1 per package	25 per package	1 per package	25 per package
LC for 900 μm for 900 μm Tight Buffer	AX104240-S1	AX104240-B25	AX104241-S1	AX104241-B25	AX104242-S1	AX104242-B25
SC for 900 μm for 900 μm Tight Buffer	AX104244-S1	AX104244-B25	AX104245-S1	AX104245-B25	AX104246-S1	AX104246-B25
ST for 900 μm for 900 μm Tight Buffer	AX104248-S1	AX104248-B25	AX104249-S1	AX104249-B25	AX104250-S1	AX104250-B25
LC for jacketed 2.0 mm * for jacketed	AX104254-S1	AX104254-B25	AX104255-S1	AX104255-B25	AX104256-S1	AX104256-B25
SC for jacketed 2.0 mm * for jacketed	AX104258-S1	AX104258-B25	AX104259-S1	AX104259-B25	AX104260-S1	AX104260-B25
ST for jacketed 2.0 mm * for jacketed	AX104262-S1	AX104262-B25	AX104263-S1	AX104263-B25	AX104264-S1	AX104264-B25
3 mm jacketed boot, bag of 25	← AX104577 →					

*The jacketed version includes a 2 mm boot. A separate part number is provided for the 3 mm boot.

Fiber*Express* Brilliance Field-Installable Single-mode Connectors

Description	Belden Part Number			
	Single-mode, OS2		Single-mode, OS2 - APC	
	1 per package	25 per package	1 per package	25 per package
LC for 900 μm Tight Buffer	AX104243-S1	AX104243-B25	—	—
SC for 900 μm Tight Buffer	AX104247-S1	AX104247-B25	AX104253-S1	AX104253-B25
ST for 900 μm Tight Buffer	AX104251-S1	AX104251-B25	—	—
LC for jacketed 2.0 mm *	AX104257-S1	AX104257-B25	—	—
SC for jacketed 2.0 mm *	AX104261-S1	AX104261-B25	AX104467-S1	AX104467-B25
ST for jacketed 2.0 mm *	AX104265-S1	AX104265-B25	—	—
3 mm jacketed boot, bag of 25	← AX104577 →			

*The jacketed version includes a 2 mm boot. A separate part number is provided for the 3 mm boot.

Fiber*Express* Field Breakout Kit

Description	Belden Part Number
6 fibers, 1/pack	AX101100
12 fibers, 1/pack	AX101101

Fiber*Express* Accessories

Description	Belden Part Number
Precision Installation Tool Kit	AX104271

Fiber*Express* Ultra Patch Panel Housings

Description	Belden Part Number
1U Patch Panel, Empty, Titanium	AX104681
2U Patch Panel, Empty, Titanium	AX104682
4U Patch Panel, Empty, Titanium	AX104683
Splice Housing Kit, 1U, 144 splices, Titanium	AX104684
Fiber*Express* Ultra HD Release Tool	AX104685
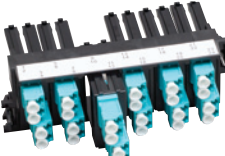
Fiber-Optic Cabling Systems (continued)

FiberExpress Ultra Pre-Terminated Cassettes

Description	Belden Part Number			
	Multimode, OM1, 62.5 µm	Multimode, OM3, 50 µm	Multimode, OM4 (Low Loss), 50 µm	Single-mode, OS2
LC Duplex - MPO (m), 24 fibers	AX103657	AX103729	AX103783	AX103837
LC Duplex - MPO (m), 12 fibers	AX103641	AX103713	AX103767	AX103821
LC Duplex with shutter - MPO (m), 12 fibers	AX103642	AX103714	—	AX103822
SC Duplex - MPO (m), 12 fibers	AX103639	AX103711	—	AX103819
SC Duplex - MPO (m), 6 fibers	AX103620	AX103692	—	AX103800
SC Duplex with shutter - MPO (m), 6 fibers	AX103621	AX103693	—	AX103801
ST - MPO (m), 12 fibers	AX103638	AX103710	—	AX103818
ST - MPO (m), 6 fibers	AX103619	AX103691	—	AX103799

See the Belden FiberExpress Ultra Pre-Terminated Cassettes Product Bulletin (PB285) for our complete offering.

FiberExpress Ultra Frames

Description	Belden Part Number				
	Multimode, OM1, 62.5 µm	Multimode, OM2, 50 µm	Multimode, OM3, 50 µm	Multimode, OM4 (Low Loss), 50 µm	Single-mode, OS2
LC Duplex, 24 fibers	AX103424	AX103451	AX103451	AX103465	AX103519
LC Duplex, 12 fibers	AX103408	AX103449	AX103449	AX103463	AX103502
LC Duplex with shutter, 12 fibers	AX103409	AX103450	AX103450	AX103464	AX103503
SC Duplex, 12 fibers	AX103406	—	AX103447	AX103461	AX103496
SC Duplex, 6 fibers	AX103385	—	AX103441	AX103455	AX103470
SC Duplex with shutter, 6 fibers	AX103386	—	AX103442	AX103456	AX103471
ST, 12 fibers	← AX103403 →				AX1034937
ST, 6 fibers	← AX103382 →				AX103467

See the Belden FiberExpress Ultra Frames Product Bulletin (PB287) for our complete offering.

FiberExpress MPO Trunk Cables—12 Fibers

Description	Belden Part Number			
	Multimode, OM1, 62.5 µm	Multimode, OM3, 50 µm	Multimode, OM4 (Low Loss), 50 µm	Single-mode, OS2-APC
Type "C" MPO 568-C.3 Cross-Over, Mini-distribution cable (round cable)				
MPO (F) - MPO (F), 12 fibers, 3 m	FA600135	FA600149	FA600163	FA600177
MPO (F) - MPO (F), 12 fibers, 5 m	FA600136	FA600150	FA600164	FA600178
MPO (F) - MPO (F), 12 fibers, 10 m	FA600137	FA600151	FA600165	FA600179
MPO (F) - MPO (F), 12 fibers, 15 m	FA600138	FA600152	FA600166	FA600180
MPO (F) - MPO (F), 12 fibers, 20 m	FA600139	FA600153	FA600167	FA600181
MPO (F) - MPO (F), 12 fibers, 25 m	FA600140	FA600154	FA600168	FA600182
MPO (F) - MPO (F), 12 fibers, 30 m	FA600141	FA600155	FA600169	FA600183
MPO (F) - MPO (F), 12 fibers, 40 m	FA600142	FA600156	FA600170	FA600184
MPO (F) - MPO (F), 12 fibers, 50 m	FA600143	FA600157	FA600171	FA600185
MPO (F) - MPO (F), 12 fibers, 60 m	FA600144	FA600158	FA600172	FA600186
MPO (F) - MPO (F), 12 fibers, 70 m	FA600145	FA600159	FA600173	FA600187
MPO (F) - MPO (F), 12 fibers, 80 m	FA600146	FA600160	FA600174	FA600188
MPO (F) - MPO (F), 12 fibers, 90 m	FA600147	FA600161	FA600175	FA600189
MPO (F) - MPO (F), 12 fibers, 100 m	FA600148	FA600162	FA600176	FA600190

Part numbers listed for most popular MPO Trunk Cables - 12 fibers. See our Belden Optical Fiber Catalog for our complete offering.

Fiber-Optic Cabling Systems (continued)

FiberExpress MPO Trunk Cables—12 Fibers (continued)

Description	Belden Part Number			
	Multimode, OM1, 62.5 µm	Multimode, OM3, 50 µm	Multimode, OM4 (Low Loss), 50 µm	Single-mode, OS2-APC
Type "A" MPO 568-C.3 Straight, Mini-distribution cable (round cable)				
MPO (F) - MPO (F), 12 fibers, 3 m	FA600191	FA600205	FA600219	FA600233
MPO (F) - MPO (F), 12 fibers, 5 m	FA600192	FA600206	FA600220	FA600234
MPO (F) - MPO (F), 12 fibers, 10 m	FA600193	FA600207	FA600221	FA600235
MPO (F) - MPO (F), 12 fibers, 15 m	FA600194	FA600208	FA600222	FA600236
MPO (F) - MPO (F), 12 fibers, 20 m	FA600195	FA600209	FA600223	FA600237
MPO (F) - MPO (F), 12 fibers, 25 m	FA600196	FA600210	FA600224	FA600238
MPO (F) - MPO (F), 12 fibers, 30 m	FA600197	FA600211	FA600225	FA600239
MPO (F) - MPO (F), 12 fibers, 40 m	FA600198	FA600212	FA600226	FA600240
MPO (F) - MPO (F), 12 fibers, 50 m	FA600199	FA600213	FA600227	FA600241
MPO (F) - MPO (F), 12 fibers, 60 m	FA600200	FA600214	FA600228	FA600242
MPO (F) - MPO (F), 12 fibers, 70 m	FA600201	FA600215	FA600229	FA600243
MPO (F) - MPO (F), 12 fibers, 80 m	FA600202	FA600216	FA600230	FA600244
MPO (F) - MPO (F), 12 fibers, 90 m	FA600203	FA600217	FA600231	FA600245
MPO (F) - MPO (F), 12 fibers, 100 m	FA600204	FA600218	FA600232	FA600246
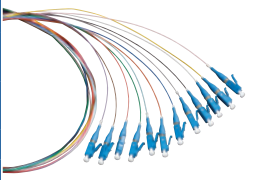
FiberExpress Patch Cords

Description	Belden Part Number					
	Multimode, OM1, 62.5 µm	Multimode, OM2, 50 µm	Multimode, OM3, 50 µm	Multimode, OM4 (Low Loss), 50 µm	Single-mode, OS2-UPC	Single-mode, OS2-APC
LC Duplex - LC Duplex, OFNR-Riser, 2 m (6 ft), Duplex Zip Cord 2.0 mm	AX200517	AX200527	AX200664	AX104647	AX200507	AX203910
LC Duplex - LC Duplex, OFNR-Riser, 3 m (10 ft), Duplex Zip Cord 2.0 mm	AX200518	AX200528	AX200665	AX104648	AX200508	AX203911
LC Duplex - LC Duplex, OFNR-Riser, 5 m (16 ft), Duplex Zip Cord 2.0 mm	AX200519	AX200529	AX200666	AX104649	AX200509	AX203912
SC Duplex - SC Duplex, OFNR-Riser, 2 m (6 ft), Duplex Zip Cord 3.0 mm	AX200056	AX200084	AX200603	—	AX203908	AX202902
SC Duplex - SC Duplex, OFNR-Riser, 3 m (10 ft), Duplex Zip Cord 3.0 mm	AX200057	AX200082	AX200589	—	AX202523	AX203870
SC Duplex - SC Duplex, OFNR-Riser, 5 m (16 ft), Duplex Zip Cord 3.0 mm	AX200058	AX200280	AX200624	—	AX203909	AX202835
ST - ST 2 m (6 ft), Duplex Zip Cord, OFNR-Riser, 3.0 mm	70102419	AX200341	AX200799	—	AX200200	—
ST - ST 3 m (10 ft), Duplex Zip Cord, OFNR-Riser, 3.0 mm	70102420	AX200459	AX200795	—	AX202089	—
ST - ST 5 m (16 ft), Duplex Zip Cord, OFNR-Riser, 3.0 mm	70102447	AX200413	AX200800	—	AX200234	—

See our Belden Optical Fiber Catalog for our complete offering.

Fiber-Optic Cabling Systems (continued)

FiberExpress Color-Coded Pigtail Kits

Description	Belden Part Number			
	Multimode, OM1, 62.5 μm	Multimode, OM3, 50 μm	Multimode, OM4 (Low Loss), 50 μm	Single-mode, OS2 - UPC
LC Color-Coded Pigtail Kit 12 fibers 2 m (6 ft) long	AX104651	AX104555	AX104655	AX104557
SC Color-Coded Pigtail Kit 12 fibers 2 m (6 ft) long	AX104652	AX104556	—	AX104558
ST Color-Coded Pigtail Kit 12 fibers 2 m (6 ft) long	AX104653	AX104654	—	AX104656

FiberExpress Cables

Description			Belden Part Number			
			2 fibers	6 fibers	12 fibers	24 fibers
Indoor	Duplex Zip Cord	Riser	B96915	—	—	—
		Plenum	B96919	—	—	—
Indoor	Distribution Tight buffer	Riser	B9X037	B9X039	B9X042	B9X601
		Plenum	B9X043	B9X045	B9X048	B9X611
	Breakout 2.0mm units	Riser	B9X005	B9X007	B9X010	B9X012
		Plenum	B9X013	B9X015	B9X018	B9X020
	Interlocked Armor Dist.	Riser	—	B9X230	B9X231	B9X232
		Plenum	—	B9X240	B9X241	B9X242
Outdoor	Loose Tube	Riser	—	B9X510T	B9X511T	B9X500T
Indoor / Outdoor	Tight buffer	Riser	B9X037T	B9X039T	B9X042T	B9X601T
		Plenum	B9X043T	B9X045T	B9X048T	B9X611T
	Loose Tube	Riser	—	B9X810	B9X811	B9X812
		Plenum	—	B9X202	B9X204	B9X205

Other Fiber Counts are available; See our Belden Optical Fiber Catalog for our complete offering.

Where **X** is replaced by:	OM1	OM2	OM3	OM4	Single-mode
	B	A	C	E	W

Other connector and adapter types are available
Other patch cord combinations and lengths are available

Brilliance® Maxi-Bend™ Tactical Cable

Description			Belden Part Number			
			2 fibers	4 fibers	6 fibers	12 fibers
Outdoor	Tactical	OM1	B96571	B96551	B96572	B96575
Outdoor	Tactical	OS2	B96566	B96639	B96567	B96570

One Enterprise.
One Infrastructure.
One Partner.

Network Solutions for Harsh Environments

Belden is a leader in industrial-grade networking equipment for use in harsh (dusty, humid, hot) environments, such as parking garages, building perimeters, blue light phones, and so forth. To meet such needs GarrettCom switches and other devices offer fan-less design and an extended operating temperature range from –40° to +85°C so they are ready for application in demanding environments.

- Managed and unmanaged Ethernet switches supporting Fast Ethernet and Gigabit Ethernet to devices
- Power over Ethernet support
- Media converters
- Choice of copper or fiber ports
- Firewall with tunneling VPN

- Full-featured management with SNMP and RMON
- Supports fault-tolerant STP, RSTP, LLL, and S-Ring protocols
- Fail-safe ring redundancy
- 19" rack, DIN rail, panel, and IP67 waterproof mounting options

Switches

	Description	GarrettCom Part Number
	Magnum Premium-rated S14 Convenient Switch, four 10/100 RJ45 ports in a compact package, rated -40°C to 75°C for temperature uncontrolled environments such as outdoors. Internal 24VDC (range 18V to 36V) power supply and metal panel mounting brackets included. For PoE 4 port switch, select PS14.	S14
	Magnum Premium-rated CS14 Converter Switch, one 100Mb multi-mode SC fiber port and two 10/100 RJ45 switch ports with auto-cross and auto-negotiating support. Two sets of LEDs for viewing from any direction. Compact package, rated for temperature uncontrolled environments such as outdoors. Internal 24VDC (range 18V to 36V) power supply with extended temperature range (-40°C to 75°C). Metal panel mounting brackets included.	CS14
	Magnum Premium-rated ES42 Edge Switch with two SC-type 100Mb fiber ports and four 10/100 RJ-45 switch ports with auto-cross and auto-negotiating support. Alarm contact for power monitoring. The two fiber ports support LLL for use in self-healing redundant LANs. Two sets of LEDs for viewing from any direction. Compact package, rated for temperature uncontrolled environments such as outdoors. Internal 12VDC (range 8V to 15V) power supply with extended temperature range (-40°C to +75°C). Includes external AC Magnum Premium-rated power supply into 12VDC jack. Supports dual source (DC and AC via jack) power input. Metal panel mounting brackets included.	ES42
	The IPS42-AC chassis provides an internal AC power supply for an ES42-series PoE switch, all in a hardened package. See the PES42P model for functional capability.	IPS42
	Magnum 6-port PES42 Premium-rated PoE Power-Sourcing Edge Switch with four 10/100 RJ-45 PoE ports and two regular RJ-45 10/100 ports with auto-cross and auto-negotiating support. Alarm contact for power monitoring, 48VDC terminal block for power input. The two regular RJ-45 ports support LLL for use in self-healing redundant LANs. Two sets of LEDs for viewing from any direction. Compact industrial-grade metal package, rated for temperature uncontrolled environments such as outdoors. All 4 PoE ports support Power Source per IEEE 802.3af standard. Metal panel mounting brackets included. DIN-Rail mounting hardware optional.	PES42
Most Popular!	Magnum 6KL Configurable Managed Edge Switch, base unit with four 10/100 copper ports. 24VDC power supply. Supports PoE and PoE+. May be configured with a variety of 10/100/1000Mb fiber and copper ports in Slots B and C. 10 ports max. Heavy duty metal case, IP52 for environmental protection, no fans. Includes two Alarm Contacts (1 PWR, 1 software controlled), metal bracket for vertical wall or panel mounting, DIN-Rail optional. For licensed network management software information (MNS-6K, MNS-6K-SECURE, S-Ring), see their respective data sheets.	6KL
	Magnum 6KQ Configurable Managed Field Switch, base unit with -48VDC power supply and four 10/100 copper ports are PoE-enabled, data pairs. May be factory-configured with a variety of 10/100/1000 Mb fiber and copper port connector types via selection from a family of 6KQ port modules per the 6KQ Configuration Guide. 16 ports max. Heavy duty fully enclosed aluminum case designed with ribbed surface for max heat dissipation, used as a heat sink, rated IP52 for environmental protection, no fans. Dual LEDs for all-around status viewing. Includes two Alarm Contacts (1 PWR, 1 software controlled), metal bracket for vertical wall or panel mounting, DIN-Rail optional. Wire speed filtering and forwarding across all ports. For licensed network management software information (MNS-6K, S-Ring, Dual-Homing, IGMP-L2, Security, etc.), see their respective data sheets.	6KQ
	Magnum 6K32F Managed Switch offers up to 32 100Mb. Fiber ports, or 32 10/100 copper ports, or 8 Gigabit ports, or combinations. The unit offers four modular slots, for user-selection of 100 Mb, 10 Mb, Gigabit ports and 10/100 copper ports with optional PoE. Wire speed filtering and forwarding across all ports, 802.3x flow control, 802.1p priority packet processing, self-learning 4K-node address table, large 240KB packet buffers for 10/100 and 120KB for 1000Mb. Plug-and-play switching services, front-mounted LEDs and also port-side LEDs for status viewing from either side, internal -48VDC (36-70VDC range) power supply, 19" rack-mounting brackets.	6K32F

Routers

	Description	GarrettCom Part Number
	DX940 Configurable Router base unit with four 100Mb SFP Ethernet ports in slot B. Includes 90 - 250V DC / AC power supply, panel mounting. Includes IP routing, Ethernet switching and secure management. MNS-DX software license included. Software includes IP Routing, per VLAN Routing, ICMP, ARP, Diffserv, Port Security, event logging and alarms, and more. Web-based GUI and CLI via Telnet. Choose from a selection of hardened 100Mb SFPs.	DX940

Visit www.garrettcom.com for more information on product colors, sizes and other options. Or contact your local Belden representative. All products interoperable with commercial Ethernet products.

Rack and Enclosure Systems

Belden enclosures and racks are designed to meet the unique requirements of security applications. These enclosures provide the flexibility and versatility needed to house and protect servers and other delicate electronic equipment, and allow the right amount of room needed for proper functioning. Key features include:

- Welded frame construction on enclosures for greater strength and support

- Numerous top and bottom entry points for easy configuration
- Cable access top features a 14.25" x 4" rubber gland which helps prevent dust from entering the enclosure
- Sliding rails can be adjusted after installation to allow for cable management and different depths of equipment, without removing terminated equipment

- EIA rails are numbered in rack space increments
- Perforated tops and cooling devices, perforated and vented doors, plus a variety of top panel options, provide effective passive convection cooling
- Electronic locks on door handles for added enclosure level security
- Power distribution units with locking receptacles
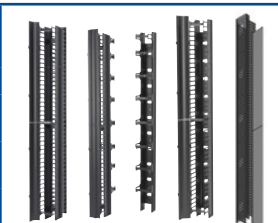
2 and 4 Post Racks

Description (H x W x D)	Model	RU	Width (in)	Depth (in)	Screw	Type	Belden Part Number
84" x 19" x 3" Channel Knock down	BHRR	45	19	-	12-24	Alum	BHRR194
84" x 19" x 6" Channel Knock down	BHRR	45	19	-	12-24	Alum	BHRR6194
84" x 23" x 3" Channel Knock down	BHRR	45	23	-	12-24	Alum	BHRR234
84" x 19" x 3" Channel Knock down	XDR	44	19	-	12-24	Steel	XDR8419-312
84" x 19" x 3" Channel Knock down	XDR	44	19	-	10-32	Steel	XDR8419-310
84" x 19" x 3" Channel Knock down	XDR	44	19	-	10-32	Steel	XDR8419-310N
84" x 19" x 3" Channel Knock down w/Vertical Manager (1)	XDR	44	19	-	10-32	Steel	XDR8419-310N1M
84" x 19" x 3" Channel Knock down w/Vertical Managers (2)	XDR	44	19	-	10-32	Steel	XDR8419-310N2M
84" x 19" x 3" Channel Knock down	XDR	44	19	-	12-24	Steel	XDR8419-312N
84" x 19" x 3" Channel Knock down w/Vertical Manager (1)	XDR	44	19	-	12-24	Steel	XDR8419-312N1M
84" x 19" x 3" Channel Knock down w/Vertical Managers (2)	XDR	44	19	-	12-24	Steel	XDR8419-312N2M
84" x 19" x 3" Channel Welded	XDR	44	19	-	10-32/12-24	Steel	XDR8419-3##W
84" x 23" x 3" Channel Welded	XDR	44	23	-	10-32/12-24	Steel	XDR8423-3##W
84" x 19" x 6" Seismic	XDR	44	19	-	10-32	Steel	XDRS8419-610
84" x 19" x 3" Channel 4 Post Knock down	XDR	44	19	24,28,32,36	10-32/12-24	Steel	XDR8419-3##XX
84" x 23" x 3" Channel 4 Post Knock down	XDR	44	23	24,28,32,36	10-32/12-24	Steel	XDR8423-3##XX

= Screw size variable 10=10-32, 12=12-24 Screws. XX = Depth - Depth 24, 28, 32, 36

Vertical Cable Managers

Description	Model	Width (in)	Depth (in)	Belden Part Number
Single Sided Vertical organizer low density	BHVL	3.6,6,10,12	8.75	BHVL0XX
Single Sided Vertical organizer high density	BHVH	3.6,6,10,12	8.75	BHVH0XX
Double Sided Vertical organizer high/low density	BHVHL	3.6,6,10,12	17.37	BHVHLXX
Double Sided Vertical organizer high/high density	BHVHH	3.6,6,10,12	17.37	BHVHHXX
Vertical manager with cover 4"W x 4"D (for 84" 2 Post rack)	VCM	4	4	VCMFDR4X4

XX = Width Variable 03=3.6", 06=6", 10=10", 12=12"

Rack and Enclosure Systems (continued)

Free Standing Enclosures

Description (H x W x D)	Model	RU'S	Width (in)	Depth (in)	Belden Part Number
84" x 29" x 30" Black, 19" Mounting, Vented Top, Perforated front & rear doors with sides	XST	25, 39, 42, 45	29	30	XST84-3-154420
84" x 29" x 34" Black, 19" Mounting, Vented top, Peforated front & rear doors with sides	XDP	25, 39, 42, 45	29	34	XDP84-3-154420
47U x 19.19" x 24" Black, 19" Mounting, Frame Only	XSF	10-48	19.19	18,24,30	XSF47-24-100000
45U x 22" x 24" Black, 19" Mounting, Vented top, vented front & rear doors with flush mount sides	XMF	11-57	22	24,30,36,40	XMF4524122220
44U x 22" x 26" Black, 19" Mounting, Vented top, Solid rear door with sides	XME	24-44	22	20,26.5	XME442620210
44U x 22" x 32" Black, 19" Mounting, Solid Top, Perf front & rear doors with solid sides	XMER	24-44	22	26.5, 31.5, 36	XMER443113320
45U x 24" x 42", Black, Square hole mounting rails, brush panel rear top, perforated front door, perforated rear door, two sets of solid side panels, solid bottom panel with brush opening	X1S	42,45,48	24	42	X1S45-C0110
45U x 24" x 42" Central Office White, Square hole mounting rails, brush panel rear top, perforated front door, perforated rear door, two sets of solid side panels, solid bottom panel with brush opening	X1S	42,45,48	24	42	X1S45-C0210
45U x 24" x 48" Black, Square hole mounting rails, brush panel rear top, perforated front door, perforated rear door, two sets of solid side panels, solid bottom panel with brush opening	X2S	42,45,48	24	48	X2S45-C0130
45U x 24" x 48" Central Office White, Square hole mounting rails, brush panel rear top, perforated front door, perforated rear door, two sets of solid side panels, solid bottom panel with brush opening	X2S	42,45,48	24	48	X2S45-C0230
45U x 30" x 42" Black, Square hole mounting rails, brush panel rear top, perforated front door, perforated rear door, two sets of solid side panels, solid bottom panel with brush opening	X3S	42,45,48	30	42	X3S45-C0150
45U x 30" x 42" Central Office White, Square hole mounting rails, brush panel rear top, perforated front door, perforated rear door, two sets of solid side panels, solid bottom panel with brush opening	X3S	42,45,48	30	42	X3S45-C0250
45U x 30" x 48" Black, Square hole mounting rails, brush panel rear top, perforated front door, perforated rear door, two sets of solid side panels, solid bottom panel with brush opening	X4S	42,45,48	30	48	X4S45-C0170
45U x 30" x 48" Central Office White, Square hole mounting rails, brush panel rear top, perforated front door, perforated rear door, two sets of solid side panels, solid bottom panel with brush opening	X4S	42,45,48	30	48	X4S45-C0270

Wall Mount Enclosures

Description (H x W x D)	Model	RU'S	Width (in)	Depth (in)	Belden Part Number
21" W x 20.125" H x 22.875" D, black, glass door with lock – no removable side panels	XWM	9	21	22.875	XWM-2109-GD
21" W x 20.125" H x 22.875" D, black, solid door with lock – no removable side panels	XWM	9	21	22.875	XWM-2109-SD
23" W x 25.250" H x 27.5" D, black, glass door with lock – removable side panels	XWM	12	23	27.5	XWM-2312-GD
23" W x 25.250" H x 27.5" D, black, solid door with lock – removable side panels	XWM	12	23	27.5	XWM-2312-SD
23" W x 39.250" H x 27.5" D, black, glass door with lock – removable side panels	XWM	20	23	27.5	XWM-2320-GD
23" W x 39.250" H x 27.5" D, black, solid door with lock – removable side panels	XWM	20	23	27.5	XWM-2320-SD

Consult Belden Cable Management Catalog to access enclosure configuration matrix and accessories listing. NEMA compliant enclosures also available.

New Generation Applications for Security, Surveillance and Access Control

Nowhere is the demand for uncompromising quality and leading-edge technology more critical than in security, surveillance and access control applications. The New Generation line of low voltage electronic systems includes one of the largest, most economical, and up-to-date selections of reliable multi-conductor and coaxial products on the market today. A full complement of cables and systems for sound, control, alarm, security, CCTV and other security applications is offered.

Belden's innovations include:

- Water-blocked options for multi-conductor cables and for coax — where security, surveillance and fire alarm cables are installed in intermittently wet environments

- Banana Peel Composite Cables, for easier and faster installation than traditional composite cables, offer no overall jacket which eliminates stripping of the jacket, individual cable components that are all instantly identifiable, a smaller OD and color-coded individual cables by application

- New Generation Safe-T-Line® Cables for Circuit Integrity meet Article 760 of the National Electrical Code for Fire-Alarm Circuit Integrity (CI) cable, the National Fire Alarm Code (NFPA 72) requirements for survivability; UL Standard 1424 — Cables for Powerlimited Fire Alarm Circuits, and UL Standard 2196 — Circuit Integrity Two-hour Flame Test

- Advanced cables to support high-definition digital video, such as HDcctv, allowing uncompressed transmission at data rates up to 1.5 Gb/s over distances up to 200 meters

Security, Alarm, Sound Cables

Description	Belden Part Number			
	Unshielded CMP	Unshielded CMR	Shielded CMP	Shielded CMR
22 AWG, 2 Cond Stranded	6500UE	5500UE	6500FE	5500FE
22 AWG, 3 Cond Stranded	6501UE	5501UE	6501FE	5501FE
22 AWG, 4 Cond Stranded	6502UE	5502UE	6502FE	5502FE
22 AWG, 6 Cond Stranded	6504UE	5504UE	6504FE	5504FE
22 AWG, 3 Pair Stranded	6542UE	5542UE	6542FE	5542FE
20 AWG, 3 Cond Stranded	6401UE	5401UE	6401FE	5401FE
20 AWG, 4 Cond Stranded	6402UE	5402UE	6402FE	5402FE
18 AWG, 2 Cond Stranded	6300UE	5300UE	6300FE	5300FE
18 AWG, 3 Cond Stranded	6301UE	5301UE	6301FE	5301FE
18 AWG, 4 Cond Stranded	6302UE	5302UE	6302FE	5302FE
18 AWG, 6 Cond Stranded	6304UE	5304UE	6304FE	5304FE
16 AWG, 2 Cond Stranded	6200UE	5200UE	6200FE	5200FE
16 AWG, 3 Cond Stranded	6201UE	5201UE	6201FE	5201FE
16 AWG, 4 Cond Stranded	6202UE	5202UE	6202FE	5202FE
16 AWG, 4 Cond Stranded/65	—	5202UP	—	—
14 AWG, 2 Cond Stranded	6100UE	5100UE	6100FE	5100FE
14 AWG, 3 Cond Stranded	6101UE	5101UE	6101FE	5101FE

Security, Alarm, Sound Cables — Waterdog Indoor/Outdoor Cables

Description	Belden Part Number			
	Unshielded CM	Shielded CM	Unshielded CMG, FPL	Shielded CMG, FPL
22 AWG, 2 Cond Stranded	—	5500F1	—	—
20 AWG, 2 Cond Stranded	—	5400F1	—	—
18 AWG, 2 Cond Stranded	5300U1	5300F1	5340U1	5340F1
16 AWG, 2 Cond Stranded	—	—	5240U1	5240F1
14 AWG, 2 Cond Stranded	—	—	5140U1	5140F1

CCTV Coax

Description	Belden Part Number			
	Cable	Connectivity		
		DB-Series RCA	DB-Series F-Male	DB-Series BNC
Copper Braid, Non-Plenum — RG-6 18 AWG Solid BC 95% BCB	533945	DB6RCAU	DB6U	DB6BNCU
Copper Braid, Plenum — RG-6 18 AWG Solid BC 95% BCB	633948	DB6RCAPL2	DB6PL2	DB6PLBNC2
Copper Braid, Non-Plenum — RG-6 18 AWG Solid BC 95% BCB, Indoor/Outdoor	5339X5	—	—	—
Copper Braid, Plenum — RG-6 18 AWG Solid BC Quad Shield	6339Q8	DB6RCAPL2	DB6PL2	DB6PLBNC2
Copper Braid, Non-Plenum — RG-59 20 AWG Solid BC 95% BCB CM CCTV PVC	543945	DB59RCAU	DB59U	DB59BNCU
Copper Braid, Non-Plenum — RG-59 20 AWG Solid BC 95% BCB CM CCTV PVC, Indoor/Outdoor	5439X5	—	—	—
Copper Braid, Plenum — RG-59 20 AWG Solid BC 95% BCB	643948	DB59RCAPL2/4	DB6PL2	DB59BNCU

DB-Series F, BNC and RCA connectors work with the CPLCRBC-BR Advanced Radial Crimp tool and PSA59/6 Cable Strip tool.
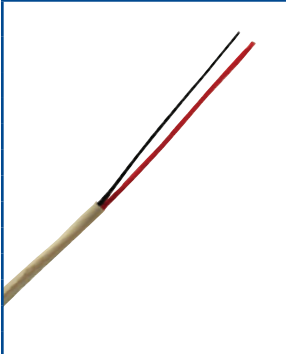
New Generation Applications for Security, Surveillance and Access Control (continued)
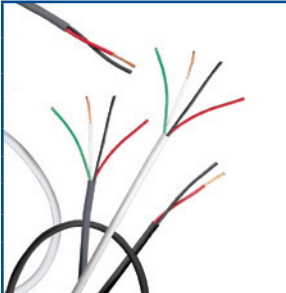
Access Control Cables

Description	Belden Part Number	
	CMP	CMR
22 AWG, 6 Cond Stranded	6504UE	5504UE
22 AWG, 10 Cond Stranded, Shielded	6508FE	5508FE
22 AWG, 12 Cond Stranded	6509UE	5509UE
18 AWG, 5 Cond Stranded, Shielded	—	5303FE
18 AWG, 6 Cond Stranded	6304UE	5304UE
18 AWG, 8 Cond Stranded, Shielded	6306FE	5306FE
18 AWG, 8 Cond Stranded	6306UE	5306UE
18-3-Pair Shield + 16-4 Cond Shield + 18-2 Cond Shield + 18-4 Cond Shield, Banana Peel Jacketless	638AFS	538AFS
22-3-Pair Shield + 18-4 Cond Shield + 22-2 Cond Shield + 22-4 Cond Shield, Banana Peel Jacketless	658AFS	558AFS
22-3-Pair Shield + 18-4 Cond Shield + 22-2 Cond Shield + 22-4 Cond Shield, Overall Jacket	658AFJ	558AFJ
22-6 Cond Shield + 18-4 Cond + 22-2 Cond + 22-4 Cond, Banana Peel Jacketless	658GMS	558GMS
22-6-Pair Shield + 18-4 Cond Shield + 22-2 Cond Shield, Overall Jacket	658GFS	558GFS
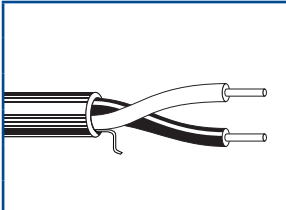
Mass Notification Cables

Description	Belden Part Number		
	Non Plenum	Plenum	Water-blocked
22 AWG, 1 Pair, Shielded	5500FE	6500FE	5500F1
18 AWG, 1 Pair, Shielded	5300FE	6300FE	5300F1
16 AWG, 1 Pair, Shielded	5200FE	6200FE	5240F1
14 AWG, 1 Pair, Shielded	5100FE	6100FE	5140F1
12 AWG, 1 Pair, Shielded	5000FE	6000FE	—
22 AWG, 1 Pair, Shielded + 22 AWG, 2 Conductor	5502GE	6502GE	5502G1
18 AWG, 1 Pair, Shielded + 18 AWG, 2 Conductor	5302GE	—	—
22 AWG, 4 Conductor, Shielded	5502FE	6502FE	—
18 AWG, 4 Conductor, Shielded	5302FE	6302FE	—
22 AWG, 2 Pair, Individually Shielded	—	1325A	—
22 AWG, 3 Pair, Individually Shielded	—	1326A	—

Speaker Cables

Description	Belden Part Number		
	Non Plenum	Plenum	Water-blocked
18 AWG, 2 Conductor	5300UE	6300UE	5300U1
18 AWG, 4 Conductor	5302UE	6302UE	5302U1
16 AWG, 2 Conductor	5200UE	6200UE	5240U1
16 AWG, 4 Conductor	5202UE	6202UE	5202U1
14 AWG, 2 Conductor	5100UE	6100UE	5140U1
14 AWG, 4 Conductor	5102UE	6102UE	5102U1
12 AWG, 2 Conductor	5000UE	6000UE	—
10 AWG, 2 Conductor	5T00UP	6T00UP	—

Fire Alarm Cables

Description	Belden Part Number			
	Unshielded FPLP	Unshielded FPLR	Shielded FPLP	Shielded FPLR
18 AWG, 2 Conductor, Unshielded	6320UL	5320UL	6320FL	5320FL
16 AWG, 2 Conductor, Unshielded	6220UL	5220UL	6220FL	5220FL
14 AWG, 2 Conductor, Unshielded	6120UL	5120UL	6120FL	5120FL
12 AWG, 2 Conductor, Unshielded	6020UL	5020UL	6020FL	5020FL

New Generation Applications for Security, Surveillance and Access Control (continued)

Circuit Integrity in Conduit (CIC) Safe-T-Line® Cable

Description	Belden Part Number	
	CIC	CI
18 AWG, 2 Conductor, Solid, Unshielded (FPLR-CI or FPLR-CIC)	5320UZ	5320UM
18 AWG, 2 Conductor, Stranded, Shielded (FPLR-CI or FPLR-CIC)	5300FZ	5300FM
16 AWG, 2 Conductor, Solid, Unshielded (FPLR-CI or FPLR-CIC)	5220UZ	5220UM
16 AWG, 2 Conductor, Stranded, Shielded (FPLR-CI or FPLR-CIC)	5200FZ	5200FM
14 AWG, 2 Conductor, Solid, Unshielded (FPLR-CI or FPLR-CIC)	5120UZ	5120UM
14 AWG, 2 Conductor, Stranded, Shielded (FPLR-CI or FPLR-CIC)	5100FZ	5100FM

Composite AV

Description		Belden Part Number			
		Cable	DB-Series RCA	DB-Series F-Male	DB-Series BNC
24-4-Pair Category 5 Bonded + RG-6 Quad, Siamese	Non-Plenum	7912A	—	—	—
	Plenum	—	—	—	—
24-4-Pair Category 5e Bonded + 16-4 Cond BC Stranded Keypad Cable	Non-Plenum	7950A	—	—	—
	Plenum	—	—	—	—
Mini RG-59 (25 AWG) + 2 Cond 20 AWG, Siamese	Non-Plenum	579945	DB1RCA	—	DB1BNC
	Plenum	679948	DB1RCA	—	DB1BNC
RG-6/U + 2 Cond 18 AWG, Siamese	Non-Plenum	539945	DB6RCAU	DB6U	DB6BNCU
	Plenum	639948	DB6RCAPL2	DB6PL2	DB6BNCPL2
	Indoor/Outdoor	5399X5	DB6RCAU	DB6U	DB6BNCU
RG-59 + 2 Cond 18 AWG, Siamese	Non-Plenum	549945	DB59RCAU	DB59U	DB59BNCU
	Plenum	649948	DB59RCAPL2/4	DB59PL2/4	DB59BNCPL2/4
	Indoor/Outdoor	5499X5	DB59RCAU	DB59U	DB59BNCU
24-2-Pair UTP Category 5e + 16-1-Pair Unshielded, Siamese	Non-Plenum	5284US	—	—	—
	Plenum	6284US	—	—	—
23-2-Pair UTP Category 5e + 16-1-Pair Unshielded, Round	Non-Plenum	5284UE	—	—	—
	Plenum	6284UE	—	—	—
2-RG-6 + 2-4-Pair Category 5e + 2 Fiber MM Banana Peel Jacketless	Non-Plenum	7914S	DB6RCAU	DB6U	DB6BNCU
	Plenum	—	—	—	—
2-RG-6 + 2-4-Pair Category 5e Banana Peel Jacketless	Non-Plenum	7913S	—	—	—
	Plenum	—	—	—	DB6RCAPL2
Water Blocked 23-2-Pair Category 5 + 16-1-Pair Unshielded, round	Non-Plenum	YM49032	—	—	—
	Plenum	—	—	—	—

DB-Series F, BNC and RCA connectors work with the CPLCRBC-BR Advanced Radial Crimp tool and PSA59/6 Cable Strip tool.

Industrial-Grade Cabling Systems

The perfect companion for rugged environments and for use with GarrettCom switches, we offer a full array of Category 5e and Category 6 Industrial Ethernet cables. Belden DataTuff cables are available in a wide range of styles:
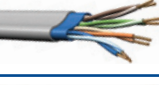
- Bonded-pair and nonbonded-pair in a variety of jacket options
- Extended temperature range
- Sunlight and oil resistant
- Unshielded or shielded constructions
- Single or dual jacketed

- Interlocked armoring
- Stranded or solid conductors
- Full range of connectors, cords, panels, racks & enclosures and cable management, including hardened connectivity per IP-67 and IP-20

Category 5e DataTuff Cables

Description	No. of Pairs	Jacket Colors/Material	Belden Part Number
Solid 24AWG Conductors, Unshielded, Bonded-Pairs, CMR	2	Black, Red, Teal PVC, Black PVC	7932A
Solid 24AWG Conductors, Foil Shield, Bonded-Pairs, CMR	2	Black, Teal PVC, Black PVC	7933A
Solid 24AWG Conductors, Unshielded, Bonded-Pairs, CMR	4	Black, Red, Teal PVC, Black PVC	7923A
Solid 24AWG Conductors, Unshielded, CMR	4	Black, Blue PVC, Black PVC	7918A
Solid 24AWG Conductors, Unshielded, Bonded-Pair, PLTC, CMR	4	Black PVC	7922A
Solid 24AWG Conductors, Unshielded, Bonded-Pair, Burial with Waterblock Gel	4	Black Polyethylene	7934A
Solid 24AWG Conductors, Unshielded, All FEP, Oil & Gas Res, Bonded-Pair CMP / CMP50 (FHC25/50)	4	Black FEP	7928A
Solid 24AWG Conductors, Unshielded, Bonded-Pair, CM	4	Black Haloarrest (LSZH)	7935A
Solid 24AWG Conductors, Unshielded, Bonded-Pairs, Double Jacket, CMR	4	Black, Gray, Red, Teal, Blue PVC, Black PVC	11700A
Solid 24AWG Conductors, Unshielded, Bonded-Pairs, Double Jacket, Oil Res I & II on Outer Jacket, CMR	4	Black, Blue PVC, Black PVC	11700A2
Stranded 24AWG Conductors, Unshielded, Bonded-Pairs, CMR	4	Black, Red, Teal PVC, Black PVC	7924A
Stranded 24AWG Conductors, Unshielded, CMR	4	Black PVC	7930A
Solid 24AWG Conductors, Foil Shield, Bonded-Pairs, CMR	4	Black, Blue PVC, Black PVC	7929A
Solid 24AWG Conductors, Foil Shield, CMR	4	Black, Blue PVC, Black PVC	7919A
Solid 24AWG Conductors, Foil Shield, Bonded-Pairs	4	Black Haloarrest (LSZH)	7936A
Solid 24AWG Conductors, Foil Shield, Bonded-Pairs, CMR, AWM UL STYLE 21047 600V	4	Black, Blue, Teal PVC, Black PVC	7958A
Solid 24AWG Conductors, Foil + Braid Shield, Bonded-Pairs, CMR / CMX Outdoor	4	Black, Red, Teal. Blue PVC, Black PVC	7921A
Solid 24AWG Conductors, Foil + Braid Shield, Bonded-Pairs, CMR, AWM UL STYLE 21047 600V	4	Black, Teal, Blue PVC, Black PVC.	7957A
Solid 24AWG Conductors, Foil Shield, Double Jacket, Waterblocked Gel, Burial	4	Black PE	7937A
Stranded 24AWG Conductors, Foil Shield, Bonded-Pairs, CMR	4	Black, Teal PVC, Black PVC	7939A
Stranded 24AWG Conductors, Foil + Braid Shield, Bonded-Pairs, 10Million Flex Rated	4	Matte Black TPE	7938A
Solid 24AWG Conductors, Interlocked Aluminum Armour, Bonded-Pairs, CM	4	Black, Gray PVC, Black PVC	121700A
Solid 24AWG Conductors, Interlocked Aluminum Armour, Bonded-Pairs, CMR	4	Black, Blue PVC	121700R

Industrial-Grade Cabling Systems (continued)

Category 6 DataTuff Cables

Description	No. of Pairs	Jacket Colors/Material	Belden Part Number
Solid 23AWG Conductors, Unshielded, Bonded-Pair, CMR/CMX Outdoor	4	Black PVC	7940A
Solid 23AWG Conductors, Unshielded, Bonded-Pair, 600MHz, CMR	4	Black PVC	7927A
Solid 23AWG Conductors, Unshielded, Bonded-Pair, CMP/CMP50 (FHC 25/50)	4	Black FEP	7931A
Solid 23AWG Conductors, Unshielded, Bonded-Pair, CMR, AWM UL Style 21047 600V	4	Black PVC	7953A
Solid 23AWG Conductors, Unshielded, Double Jacketed, Bonded-Pair, CMR	4	Gray PVC	11872A
Solid 23AWG Conductors, Double Jacketed and Interlocked Aluminum Armour, Bonded-Pair, CMR	4	Black, Gray PVC	121872A

TrayOptic® Industrial, Heavy-Duty, All Dielectric Cable

Description	No. of Fibers	No. of Fibers Per Bundle	Belden Part Number				
			OM1 62.5 / 125 µm Std. / 1 Gb	OM2 50 / 125 µm Std. / 1 Gb	OM3 50 / 125 µm 10 Gb – 300 m	OM4 50 / 125 µm 10 Gb – 400 m	OS2 Single-mode Enhanced
Riser (NEC/CEC OFNR/OFN FT.4) PVC Jacket Indoor/Outdoor							
	2	2	I100255	I1A0255	I1C0255	I1E0255	I1W0255
	4	4	I100455	I1A0455	I1C0455	I1E0455	I1W0455
	6	6	I100655	I1A0655	I1C0655	I1E0655	I1W0655
	8	4	I400855	I4A0855	I4C0855	I4E0855	I4W0855
	12	6	I601255	I6A1255	I6C1255	I6E1255	I6W1255
	18	6	I601855	I6A1855	I6C1855	I6E1855	I6W1855
	24	6	I602455	I6A2455	I6C2455	I6E2455	I6W2455
	36	6	I603655	I6A3655	I6C3655	I6E3655	I6W3655
	48	12	I604855	I6A4855	I6C4855	I6E4855	I6W4855
	60	12	I606055	I6A6055	I6C6055	I6E6055	I6W6055
	72	12	I607255	I6A7255	I6C7255	I6E7255	I6W7255
Riser (NEC/CEC OFNR/OFN FT.4) CPE Jacket Indoor/Outdoor							
	2	2	I100266	I1A0266	I1C0266	I1E0266	I1W0266
	4	4	I100466	I1A0466	I1C0466	I1E0466	I1W0466
	6	6	I100666	I1A0666	I1C0666	I1E0666	I1W0666
	8	4	I400866	I4A0866	I4C0866	I4E0866	I4W0866
	12	6	I601266	I6A1266	I6C1266	I6E1266	I6W1266
	18	6	I601866	I6A1866	I6C1866	I6E1866	I6W1866
	24	6	I602466	I6A2466	I6C2466	I6E2466	I6W2466
	36	6	I603666	I6A3666	I6C3666	I6E3666	I6W3666
	48	12	I604866	I6A4866	I6C4866	I6E4866	I6W4866
	60	12	I606066	I6A6066	I6C6066	I6E6066	I6W6066
	72	12	I607266	I6A7266	I6C7266	I6E7266	I6W7266

Industrial-Grade Cabling Systems (continued)

Connectivity

Description	Belden Part Number

Modular Jacks (RJ45). Cat 5e. IP67

	Description	Belden Part Number
	UTP, Black, Tethered Cap, Qty. 1	E100501 010S1
	FTP, Black, Tethered Cap, Qty. 1	E100502 010S1

Plug Kits (RJ45). Cat 5e. IP67

	Description	Belden Part Number
	UTP, Black, Tethered Cap, Qty. 1	E300501 010S1
	FTP, Black, Tethered Cap, Qty. 1	E300502 010S1

Modular Jacks (RJ45). Cat 6. IP67

	Description	Belden Part Number
	UTP, Black, Tethered Cap, Qty. 1	E100601 010S1
	FTP, Black, Tethered Cap, Qty. 1	E100602 010S1

Field-Installable Metal Body Ruggedized Plug (RJ45). Cat 6. IP20

	Description	Belden Part Number
	UTP/STP, T568A Plug, Qty. 1	R301601 000S1
	UTP/STP, T568B Plug, Qty. 1	R301602 000S1

Stainless Steel Faceplates. IP67

	Description	Belden Part Number
	Single Gang, 1-port, Qty. 1	E200001 000S1
	Single Gang, 2-port, Qty. 1	E200002 000S1
	Double Gang, 4-port, Qty. 1	E200004 000S1

Surface Mount Boxes. IP67

	Description	Belden Part Number
	1-port, White/Stainless Steel Cover, Qty. 1	E200101 009S1
	2-port, White/Stainless Steel Cover, Qty. 1	E200102 009S1
	3-port, White/Stainless Steel Cover, Qty. 1	E200103 009S1
	4-port, White/Stainless Steel Cover, Qty. 1	E200104 009S1

Tools

	Description	Belden Part Number
	Hand Tool to Crimp RJ45 Plugs. Black with Blue Handle, Qty. 1	E400001 006S1
	Cable Stripper, Gray, Qty. 1	E400003 008S1
	Punch-Down Connecting Tool, Qty. 1	AX100749
	Punch-Down Connecting Tool Pouch, Qty. 1	C0054642

Part Number Index

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SENDING ALL THE RIGHT SIGNALS®

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