

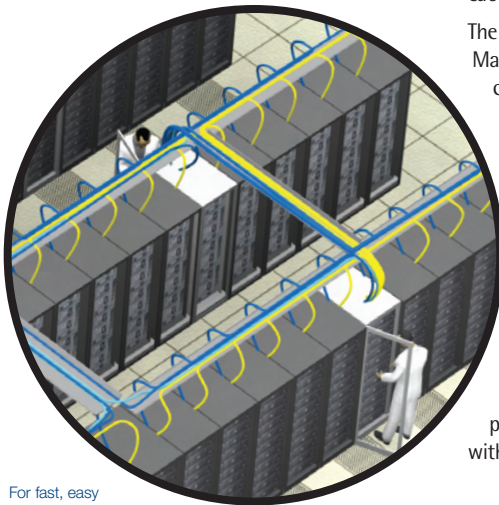
NP 304

Belden® 3600 Pre-Terminated Cabling System

- 'Pre-Term Made Easy'™
- Save Time and Money
- Category 6 Compliant
- No Compromise on Performance and Reliability
- Green Solution



Belden 3600 Pre-Terminated Cabling System Is The Ideal Solution for Data Centers and the Office Environment



For fast, easy deployment with built-in reliability and performance, use 3600 Pre-Terminated Cabling Systems.

At the heart of Belden's 3600 Pre-Terminated Cabling System are two core components: 3600 Pre-Terminated Cable Assemblies and CAT6+ RJ45 Modular Couplers. Individually, these components offer superior reliability and performance. Together, they deliver the full potential of pre-terminated copper cabling solutions.

The Belden solution is referred to as 'Pre-Term Made Easy' because it brings simplicity to the configuring and ordering process and it offers ease of installation through flexible 3600 Cable Assemblies and plug-and-play CAT6+ RJ45 Connectivity. Furthermore, with simple planning, fast delivery, up to 90% reduction in installation time and labor cost, and with virtually no testing or troubleshooting required, Belden's 3600 Pre-Terminated Cabling System delivers the promise of pre-terminated cabling systems: dramatically reduced installation time, cost-savings, and the reliability and performance of factory terminations – all without compromises or trade-offs.

Ideal for Data Centers and in Office Environments

Belden understands that the ultimate goal in Data Center networks is to have zero downtime or 'extreme' network availability. In a risk-adverse environment with very strict schedule constraints and budgets, demanding reliability and performance without compromise is a must. And today's office areas demand quick deployment, reusability and performance. This is why these are both great environments for the 3600 Pre-terminated Cabling System. Cabling deployment can be accelerated using the 3600 Pre-terminated Cabling System. And all cabling components can be re-used which is a plus in new "green" buildings. Belden's 3600 Pre-terminated Cabling System delivers built-in reliability combined with guaranteed performance and headroom.

Moreover, the system is fully supported under Belden's IBDN 3600 Certification Program including guaranteed bandwidth of 280 MHz and Belden's 25-Year IBDN Product Warranty.

3600 Pre-Terminated Cabling System

Belden's 3600 Pre-Terminated Cabling System delivers the promise of pre-terminated cabling systems – all without compromises or trade-offs.

Pre-Term Made Easy

- Easy to configure: only a few standard components to choose from to build an entire system
- Easy to order: simplified ordering process eliminates errors
- Easy to install: small and flexible cable assemblies combined with plug-and-play RJ45 connectivity

Reliability and Performance – No Compromise

- Built-in reliability with ultra-robust assemblies and connectors
- Guaranteed Category 6 performance with test results supplied with each assembly
- Guaranteed headroom up to 280 MHz
- Guaranteed headroom in channels as short as 5 ft (1.6 m)
- Fully supported under Belden's IBDN 3600 Certification Program

Save Time and Money

- Reduced planning time with simplified selection of modular components
- Fast delivery to meet short project turn-around deadlines
- Up to 90% reduction in installation time and labor costs
- Virtually no testing or troubleshooting required

Make it "Green"

- Simplicity of the components means energy and waste savings throughout the manufacturing and supply chain process
- Small and flexible cable assembly design mean less cable to be deployed and no unnecessary slack
- Plug-and-play RJ45 connectivity components significantly reduce installation time and labor costs with almost no product waste during installation and operation
- All system components can be easily re-deployed and reused



3600 Pre-Terminated System accelerates open office cabling deployment and allows the entire cabling system to be reusable.



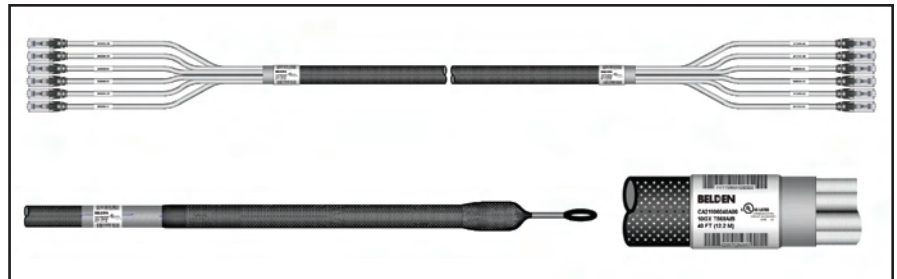
3600 Pre-Terminated Cable Assemblies

3600 Pre-Terminated Cable Assemblies are the first of the two cornerstones of the new 3600 Pre-Terminated Cabling System. They make use of the best cabling technologies to ensure that the 3600 Pre-Terminated Cable Assemblies provide reliability and performance beyond the Category 6 standard – without compromise.

The use of a braided sleeve and pulling eyes offers additional protection needed when pulling and routing the assemblies through overhead trays, raised floors, cabinet poke-throughs and cable management hardware. The small and flexible cable assembly design combined with RJ45 plugs allows the 3600 Pre-Terminated Cable Assemblies to be the easiest pre-terminated copper assemblies to install.

Features and Benefits

- Made with extremely robust 3600 cable to deliver additional throughput and enhanced error-free performance to support high-bit-rate applications.
- Standardized 6-cable bundle for smaller assembly diameter to ease pulling, routing and cable management
- Assembly covered with high-strength braided sleeve and pre-attached pulling eyes for additional protection when pulling and routing the assemblies
- Cable ends terminated with RJ45 plugs protected with compact and flexible strain-relief boots for optimum connection integrity and faster termination
- Straight cable end alignment for center, left- or right-entry cable dressing in patch panels
- Available in 1-foot increments from 6–50 ft assembly lengths, and 5-foot increments from 55–295 ft assembly lengths
- Labeled with a unique serial number and bar code for easier asset management
- 100% factory tested with test results supplied with each assembly



3600 Pre-Terminated Cable Assemblies provide reliability and performance beyond the Category 6 standard. Pulling eyes are installed at both ends to ease installation.



The use of a high-strength braided sleeve serves to protect the assemblies during pulling and routing installation procedures. Cable ends are terminated with RJ45 plugs that are protected with compact and flexible strain relief boots.

Technical Specifications

Performance

- Category 6 – TIA/EIA-568-C.2 standard component compliant, for horizontal cable length up to 295 ft (90 m), and for channel length up to 330 ft (100 m)
- 3600 System Component – Guaranteed up to 280 MHz

Assembly Physical Characteristics

- Nominal cable assembly diameter:
 - 0.75 in. (19.0 mm) over sleeve section
 - 1.4 in. (35.6 mm) over pulling eye section

- Braided sleeve:
 - Flame retardant PET for CMR assemblies
 - Plenum-rated ECTFE for CMP assemblies
- Pulling eye maximum pulling strength: > 100 lb
- Rip cord to remove pulling eye tape
- Wrap-around label with unique serial number and bar code, part number, performance rating, termination scheme and length at both ends

3600 Pre-Terminated Cable Assemblies Make Use of the Best Belden Cabling Technologies.

3600 Pre-Terminated Cable Assemblies (continued)

Technical Specifications (continued)

Cable Physical and Mechanical Characteristics

- Nominal individual cable diameter: 0.235 in. (5.97 mm)
- Twisted-pair construction: Belden's patented Bonded twisted pairs
- Conductors: 23 AWG solid copper
- Insulation:
 - Polyolefin for riser (CMR) cables
 - FEP for plenum (CMP) cables
- Outer and inner jackets:
 - PVC for riser (CMR) cables
 - LSPVC for plenum (CMP) cables
- Jacket color: Blue, White, Black
- Termination interface RJ45 plugs on both ends
- Boots: translucent PVC
- Wrap-around label with unique serial number, port number (1 to 6), part number, performance rating, termination scheme and length at both ends

Qualifications

- ETL Verified Category 6
- Cable Assembly: UL Listed as Communications Circuit Accessories
- Cable: UL Listed CMR or CMP
- 8-Position Modular Plug: FCC Part 68 Subpart F, IEC 603-7: 1990

Packaging

- Individually coiled and packaged
 - In a box for 6-120 ft lengths
 - On a reel for lengths over 125 ft
- Test results included for each assembly

Visit www.belden.com to obtain Detailed Specifications and Technical Data sheets of these products.

3600 Bonded-Pair Cable – 4-pair, 23 AWG, Solid

Used in 3600 Pre-Terminated Cable Assemblies

Frequency (MHz)	THE BONDED-PAIR ADVANTAGE											
	Max. Insertion Loss (dB/100 m)		Min. PSNEXT (dB)		Min. PSACR (dB)		Min. PSACRF (dB)		Min. Return Loss (dB)*		Min. Balance TCL (dB)*	
	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden	TIA	Belden
1	2.0	2.0	72.3	77.3	70.3	75.3	64.8	69.8	20.0	20.0	40.0	37.0
4	3.8	3.7	63.3	68.3	59.5	64.6	52.8	57.8	23.0	23.0	40.0	25.0
8	5.3	5.2	58.8	63.8	53.4	58.6	46.7	51.7	24.5	24.5	40.0	18.9
10	6.0	5.8	57.3	62.3	51.3	56.5	44.8	49.8	25.0	25.0	40.0	17.0
16	7.6	7.4	54.2	59.2	46.7	51.9	40.7	45.7	25.0	25.0	38.0	12.9
20	8.5	8.3	52.8	57.8	44.3	49.5	38.8	43.8	25.0	25.0	37.0	11.0
25	9.5	9.3	51.3	56.3	41.8	47.1	36.8	41.8	24.3	25.0	36.0	9.0
31.25	10.7	10.4	49.9	54.9	39.2	44.5	34.9	39.9	23.6	25.0	35.1	-
62.5	15.4	15.0	45.4	50.4	30.0	35.4	28.9	33.9	21.5	25.0	32.0	-
100	19.8	19.3	42.3	47.3	22.5	28.0	24.8	29.8	20.1	25.0	30.0	-
200	29.0	28.3	37.8	42.8	8.8	14.5	18.8	23.8	18.0	21.6	27.0	-
250	32.8	32.1	36.3	41.3	3.5	9.2	16.8	21.8	17.3	20.5	26.0	-
300	-	35.6	-	40.1	-	4.5	-	20.3	-	20.1	-	-
350	-	38.9	-	39.1	-	0.3	-	18.9	-	19.8	-	-
400	-	42.0	-	38.3	-	-	-	17.8	-	19.5	-	-
450	-	45.0	-	37.5	-	-	-	16.7	-	18.9	-	-
500	-	47.9	-	36.8	-	-	-	15.8	-	18.4	-	-
550	-	50.6	-	36.2	-	-	-	15.0	-	18.0	-	-
600	-	53.3	-	35.6	-	-	-	14.2	-	17.6	-	-
650	-	55.9	-	35.1	-	-	-	13.5	-	17.2	-	-

Values above 350 MHz for engineering purposes only.

* Belden's Bonded-Pair Cables provide improved return loss and balance performance.



CAT6+ RJ45 Coupler

The CAT6+ RJ45 Coupler is the second cornerstone of the new CAT6+ Pre-Terminated Cabling System, bringing RJ45 plug-and-play connectivity to a new higher level of performance. The inherent simplicity of a RJ45-to-RJ45 feed-through coupler (also called an inline coupler) brings modularity and flexibility to the 3600 Pre-Terminated Cabling System. The CAT6+ RJ45 Coupler is a KeyConnect module that is compatible with Belden's full line of KeyConnect modular patch panels, adapters and faceplates.

Features and Benefits

- New compact modular component reducing complexity of pre-terminated solution installation and allowing for fast and efficient cabling installation
- CAT6+ plug-and-play RJ45 connectivity compatible with 3600 Pre-Terminated Cable Assemblies and CAT6+ Modular Cords
- Compatible with Belden's KeyConnect modular patch panels, adapters and faceplates – no need for special hardware
- Well-balanced connector with outstanding transmission performance in short and long channels, well beyond Category 6 standards
- Reusable and reconfigurable component allowing for front and back patch panel reconfiguration

Technical Specifications

Performance

- Category 6 – TIA/EIA-568-C.2 standard component compliant

Physical and Mechanical Characteristics

- Dimensions (H x W x D): 0.895" x 0.569" x 1.522" (22.7 x 14.5 x 38.7 mm)
- Color: Black (more colors will be available soon)
- Termination interface: RJ45 jack on both sides (feed-through coupler)
- Wiring scheme: T568A/B
- Footprint: Compatible with KeyConnect modular products

Qualifications

- ETL Witnessed Category 6 channel
- UL Listed as Communications Circuit Accessories
- FCC Part 68 Subpart F, IEC 603-7: 1990

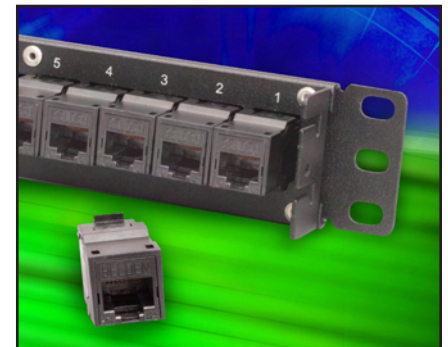
Packaging

- Individually packaged in a plastic bag. Standard pack of 50 units.

Visit www.belden.com to obtain Detailed Specifications and Technical Data sheets of these products.



The CAT6+ RJ45 Coupler brings plug-and-play connectivity to a whole new level of performance.



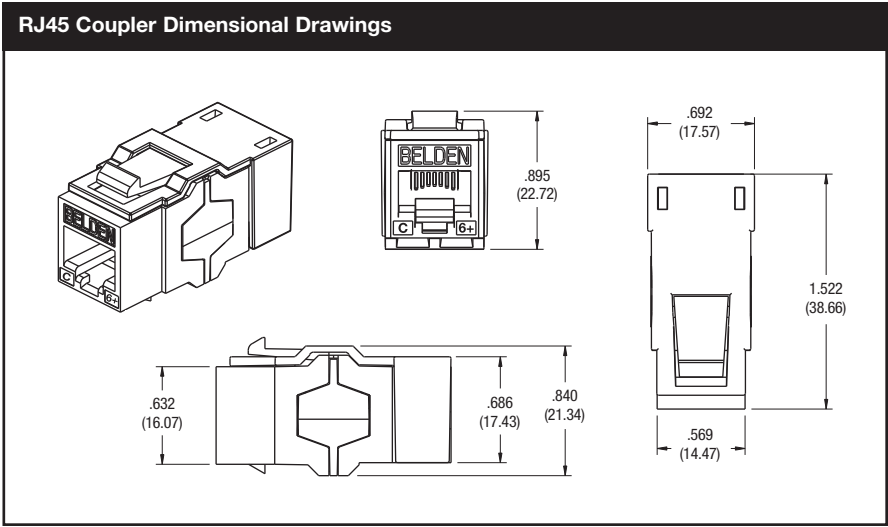
The CAT6+ RJ45 Coupler allows for fast and easy RJ45 plug-and-play in patch panel installations.



The 3600 Pre-Terminated Cabling System was designed to deliver the full potential of a pre-terminated copper cabling solution.

CAT6+ RJ45 Coupler (continued)

The CAT6+ RJ45 Coupler Brings RJ45 Plug-and-Play Connectivity to a New, Higher Level of Performance.



CAT6+ RJ45 Coupler Transmission Performance

Frequency (MHz)	Max. Insertion Loss (dB)		Min. NEXT (dB)		Min. FEXT (dB)		Min. Return Loss (dB)		Min. Balance TCL/TCTL (dB)	
	TIA*	Belden**	TIA*	Belden**	TIA*	Belden**	TIA*	Belden**	TIA*	Belden**
1	0.10	0.10	75.0	75.00	75.0	77.0	30.0	32.0	40.0	42.0
4	0.10	0.10	75.0	75.00	71.1	75.1	30.0	32.0	40.0	42.0
8	0.10	0.10	75.0	75.00	65.0	69.0	30.0	32.0	40.0	42.0
10	0.10	0.10	74.0	75.00	63.1	67.1	30.0	32.0	40.0	42.0
16	0.10	0.10	69.9	70.92	59.0	63.0	30.0	32.0	40.0	42.0
20	0.10	0.10	68.0	68.98	57.1	61.1	30.0	32.0	40.0	42.0
25	0.10	0.10	66.0	67.04	55.1	59.1	30.0	32.0	40.0	42.0
31.25	0.11	0.11	64.1	65.10	53.2	57.2	30.0	32.0	38.1	42.0
62.5	0.16	0.16	58.1	59.08	47.2	51.2	28.1	32.0	32.1	36.1
100	0.20	0.20	54.0	55.00	43.1	47.1	24.0	28.0	28.0	32.0
200	0.28	0.28	48.0	48.98	37.1	41.1	18.0	22.0	22.0	26.0
250	0.32	0.32	46.0	47.04	35.1	39.1	16.0	20.0	20.0	24.0
280	-	0.33	-	45.07	-	38.2	-	19.1	-	23.1
300	-	0.35	-	43.87	-	37.6	-	18.5	-	22.5

* TIA/EIA-568-C.2 Category 6 Standard

** Worst-case performance for a CAT6+ mated connection using CAT6+ modular plugs on both sides

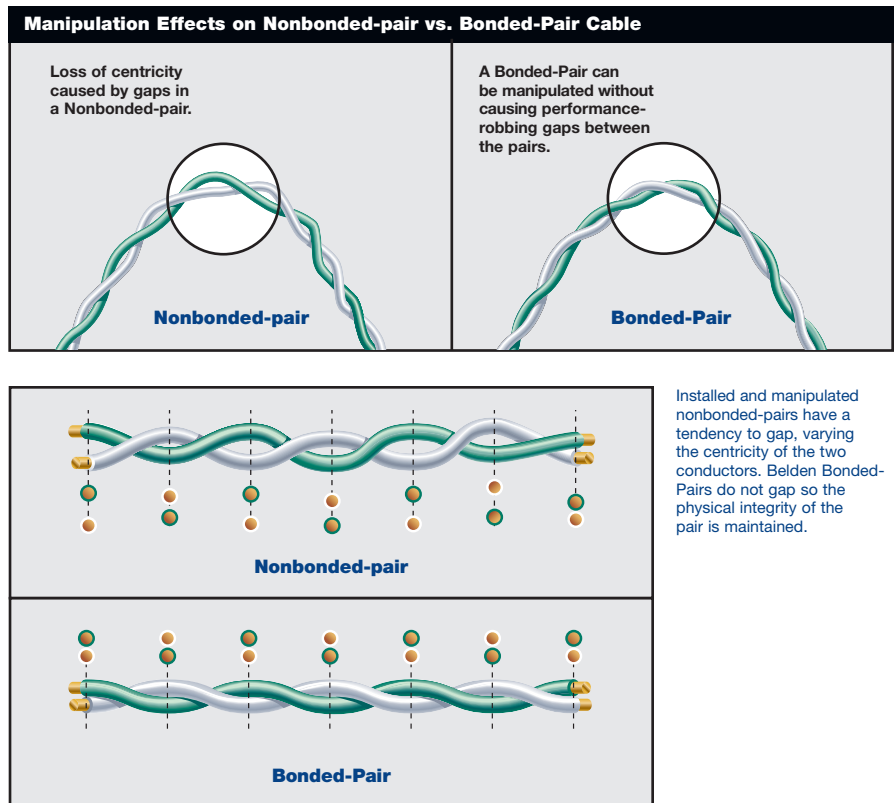


The Bonded-Pair Advantage

Belden's breakthrough Bonded-Pair Cables are the result of a patented design that bonds the individual insulated conductors together along their longitudinal axes. This unique physical characteristic results in uniform conductor-to-conductor spacing – a key aspect in consistent electrical performance.

In contrast, the stresses of cable assembly and modular cord handling will change the physical structure of a nonbonded-pair cable. When assemblies and cords are squeezed and bent in pathways and cable managers, the majority of the pulling force is distributed to the pairs of the cable. The pairs must withstand this force, despite being tugged around bends and corners – while, ideally, maintaining a consistent centricity. Furthermore, any kink in the cable also changes the relationship of the conductors of a pair. For these reasons, the electrical properties of a nonbonded-pair cable can degrade over time.

Bonded-Pair Cable, Cable Assemblies and Modular Cables maintain their physical integrity – and therefore their electrical performance – even when subjected to handling stresses during installation and throughout their use. This means less trouble-shooting and downtime for the end-user.



Ordering Information

3600 Pre-Terminated Cabling System Ordering Information

The following tables provide ordering numbers for the 3600 Pre-Terminated Cabling System components. Contact our Customer Service or Technical Support Departments for more information for each product.

Cable Assemblies

Description	Belden Part Number
3600 Pre-Terminated Cable Assembly, Bonded-Pair, 4-Pair, 23 AWG Solid, T568A/B-T568A/B, 6 Cables	
CMP, Black	C601100xxxA06
CMR, Blue	C601106xxxA06
CMR, White	C601109xxxA06
CMP, Black	C602100xxxA06
CMP, Blue	C602106xxxA06
CMP, White	C602109xxxA06

Use xxx to specify length in feet - 006-050 ft in increments of 1 ft - 055-295 ft in increments of 5 ft

Modular Couplers

Description	Belden Part Number
CAT6+ KeyConnect RJ45 Coupler	AX104215

* Other colors will be available soon.

Coupler Patch Panels

Description	Belden Part Number
CAT6+ KeyConnect Coupler Patch Panel (Preloaded)	AX104227
CAT6+ KeyConnect Coupler Patch Panel (Preloaded)	AX104228

Modular Patch Panels

Description	Belden Part Number
KeyConnect Modular Patch Panel (Empty)	AX103114
KeyConnect Modular Patch Panel (Empty)	AX103115
KeyConnect Modular Patch Panel (Empty)	AX103116
KeyConnect Modular Patch Panel (Empty)	AX103121
KeyConnect AngleFlex Patch Panel (Empty)	AX103248
KeyConnect AngleFlex Patch Panel (Empty)	AX103249

Modular Cords

CAT6+ Patch Cord, Bonded-Pair, 24 AWG Solid, T568A/B-T568A/B, CMR

Length	Belden Part Number					
	Yellow	Green	Blue	Gray	White	Black
2 ft (0.6 m)	C601104002	C601105002	C601106002	C601108002	C601109002	C601100002
4 ft (1.2 m)	C601104004	C601105004	C601106004	C601108004	C601109004	C601100004
7 ft (2.1 m)	C601104007	C601105007	C601106007	C601108007	C601109007	C601100007
10 ft (3.0 m)	C601104010	C601105010	C601106010	C601108010	C601109010	C601100010
15 ft (4.6 m)	C601104015	C601105015	C601106015	C601108015	C601109015	C601100015
25 ft (7.6 m)	C601104025	C601105025	C601106025	C601108025	C601109025	C601100025

All information is subject to change without notice, since Belden reserves the right to change its products as progress in engineering and manufacturing methods or other circumstances may warrant.