Overview

Whether it’s for a data center or a LAN application, a cabling and connectivity solution that can be deployed rapidly – without sacrificing performance – helps save time, resources and money for installers and end-users.

Factors like field termination can slow down installation and increase project costs, which is why pre-terminated cable has long been a reliable and efficient installation solution for data center applications. Because this type of cable is pre-terminated in the factory, it’s tested, shipped out and ready to go upon arrival – with no field-termination work necessary.

Using a pre-terminated solution in applications beyond the data center hasn’t typically been an option due to large diameter sizes, cable bundles that are bogged down with RJ45 jacks on both ends and the difficulty associated with determining cable lengths early enough in the project to get the pre-terminated solutions you need.

But that’s about to change: Belden’s REVConnect Connectivity System is now being integrated into copper pre-terminated assemblies, and it’s transforming how the industry thinks of – and uses – pre-terminated cable.

This solution is the first pre-terminated solution that can be used in applications beyond the data center, providing whole new levels of flexibility, time savings and installation options in enterprise LAN projects.

The Issues with Current Pre-Term Solutions

Some pre-terminated solutions make use of large, wide cassettes on the ends of cables, making it impossible to pull them through tight spaces like conduit or furniture. These cables could be pulled from the consolidation point back to the telecommunications room, but that process is cumbersome and not practical. As a result, this type of solution isn’t easy to use in LAN applications.
The Solution to Pre-Term Troubles

Instead of an RJ45 jack at the end of the cable, Belden’s REVConnect pre-terminated trunks feature the unique, compact REVConnect universal core at each end (the same core featured in REVConnect jacks and plugs).

This core is comprised of a cable manager and cap. The cap uses eight insulation piercing contacts to create a highly reliable, gas-tight termination. REVConnect pre-terminated assemblies work just like previous Belden RJ45 pre-terminated assemblies – with the one notable difference in what’s at the end of the cable. This solution also eliminates the need for RJ45 couplers.

Installers now have the versatility and flexibility to connect to either a jack, plug or coupler later – and end-users can swap a jack for a plug down the road (or vice versa) without needing to call the installer back in to terminate and test the new connector. This makes connecting to end devices like surveillance cameras, wireless access points and PoE LED lighting systems faster and easier. The project doesn’t need to come to a halt as everyone waits on a decision to be made about whether the cable will run to a consolidation point or directly to a device. This also allows color customization for jacks and plugs as well, allowing you to maintain the color-coding scheme you’ve established for your data center and network.

The REVConnect Deployment Strategy

Typically, in a traditional consolidation-point application, a cable runs to the back of a patch panel. From there, pigtails (a modular plug on one end while the other end is open, going to the back of a workstation and terminated to a jack) are connected to the patch panel and terminated on the workstation outlet jacks.

With REVConnect, it’s now possible – for the first time – to easily pull a bundle of pre-terminated cable from the telecommunications room out to a consolidation point and be connected to an end device or workstation outlet jacket.

Don’t know the cable length you’ll need? That’s okay! Using a single-ended cable terminated with a REVConnect core assembly can save time, labor and money. The other end of the cable can be terminated in the field using the same REVConnect technology.
The REVConnect solution allows you to pull bundles of pre-terminated trunks from the telecommunications room out to a consolidation point that contains a REVConnect preloaded patch panel or REVConnect couplers. Using a REVConnect coupler can reduce material costs by up to 30% when compared to the cost of a jack.

On top of those savings, you’ll also save more money because you can simply use a piece of cable from the consolidation point to the workstation outlet and terminate it on both ends – or continue with your pre-terminated solution and use an assembly with REVConnect cores on either end.

From there, pre-terminated single- or double-ended REVConnect core cable assemblies can be run to wherever you need to attach them: an end device (like a sensor, wireless access point, digital display, etc.) using a REVConnect or FlexPlug, or a workstation outlet using a REVConnect jack.

There are no wide cassettes or RJ45 jacks in the way to prevent you from pulling the pre-terminated cable through conduit, furniture or other tight spaces. Either side can accept a core for regular cable or pre-terminated trunk runs. REVConnect core-to-core trunks are designed to easily create REVConnect RJ45 plugs, jacks or pre-loaded patch panels that work well together. This gives you more flexibility, cost-saving benefits and a cleaner installation.

Your Next Step

With this one-of-a-kind innovation, you now you have more options when it comes to using pre-terminated cable for enterprise network projects and connecting end devices to networks.

With REVConnect’s universal core end, you can decide at any point in your project whether a jack or a plug will be used (and even change your mind once the decision has been made).

REVConnect pre-terminated assemblies are currently available in bundle sizes of six, eight or 12 in lengths of up to 300 feet using our popular braided leaf design, which keeps all cables together inside the bundle.

Coming soon are bundle sizes of two and four, along with a single cable (to run from the consolidation point to each workstation outlet or end device).

Want to learn more about the technology behind REVConnect, discover the components that make up the REVConnect Connectivity System or see the solution in action? Visit belden.com/REVConnect.