

Product Bulletin

PB00170

Brilliance® Tactical Fiber Optic Cables

Belden rugged and resilient fiber optic cables, designed for use in mobile communications systems, digital camera transmissions in electronic news gathering, OB vehicles, underground and underwater research and industrial applications.



Belden® Brilliance Tactical Fiber Optic Cables: Bend-Insensitive and Core-Bonded for Fast, Easy Use at Outdoor Events Broadcasters covering events outdoors, face tough challenges in installing their mobile communications and broadcast systems. They are constantly seeking smaller, lighter weight equipment and cabling that can be easily transported in their mobile trucks and installed quickly and easily.

Belden Brilliance Tactical Fiber Optic cables are designed and constructed to facilitate fast, easy field deployment. The single-mode cables are ideal for use in digital camera transmissions, electronic news gathering and OB vehicles and other eventrelated communications systems. The cables can also be used in underground and underwater research and industrial applications.

Rugged yet Flexible Construction for Reliable Outdoor Performance

Belden Tactical Fiber Optic cables are constructed for maximum performance and reliability. They are made with extremely strong, rugged, and survivable tight-buffered fibers. They feature an aramid yam strength member which is core-bonded to a jacket made from exceptionally tough, sun-light and chemical resistant polyure thane (PUR). The round outer jacket is flame retardant according to IEC60332-2 and highly resistant to abrasion, crushing and cut-through.

Core-Bonded – Easier, Stronger and Better Performance

Belden Tactical Fiber Optic cables feature Belden's proprietary core-bonded technology: the outer jacket is pressure extruded over the interior cable structure. This allows the cable core and jacket to act as one mechanical unit and simplifies its installation. In severe bends, the corebonded cable outer jacket keeps the cable elements in place, which retains the round shape of the cable, provides localized bend limits, and avoids wrinkling of the cable's outer jacket. This construction helps to resist tearing and prevents subsequent damage to the cable. The core-bonded outer jacket is designed with a polyester ripcord that easily opens up the outer jacket for fast access to the tight buffered fibers.

Improved Flexibility and Resiliency

These cables are smaller and lighter in weight than traditional tactical fiber cables. As a result, they have a smaller bend radius capability and improved flexibility and resiliency (cable memory) over a broad range of outdoor temperatures and weather conditions.



Heavy Duty applications

For heavy duty applications Belden developed an even more ruggedized version, with all the advantages of the standard core-bonded tactical cable, but with an extra rodent protection layer of glassyams over the inner PUR jacket, and an extra outer PUR jacket.

Faster, Easier Installation – Even with Repeated Use

These cables are ideal for professional broadcasters in TV, radio and OB vans, covering outdoor news, sporting events and/or other outdoor activities. They are also designed for use in sports venues such as race tracks and stadiums.

The key advantages of these cables include superior bend performance – thanks to the use of bendinsensitive fiber, much better pulling tension, low

memory effect, ease of termination, excellent impact and crush resistance, abrasion, cut and chemical resistance. Compact, round cable design allows easy transportation and deployment, whilst the cables are extremely strong, lightweight and rugged.

Ideal Solution for a Range of Applications

Belden field deployable Tactical Fiber Optic cables are ideal for use in:

- Field video broadcast
- Digital camera transmission
- ENG vehicles and OB vans
- Re-deployable communications
- Underground and underwater research and industrial applications
- Military communications

For installers, the benefits of transporting and deploying smaller, lighter, more flexible

tactical cables are clear. They occupy less space and add less weight to their mobile trucks. Installation can be performed in less time and with significantly less effort. Their ruggedness and resiliency allows the cables to be deployed repeatedly – and still deliver the quality performance required by the broadcast industry. They are compatible with all optical fiber connector types.

Tactical Fiber cable assemblies

Belden assemblies with tactical fiber cable can be configured with above two cables GMTT and GMRT. For the connectors a choice can be made out of: LC/UPC, LC/APC, SC, SC/APC, ST, E2000/APC and MPO. The assemblies have a stagered fanout with on both sides a re-usable protection tube. The cable is spooled on professional Schill drums for use in the field. The type of drum depends on the length and type of cable.



PART NUMBERS for Cable

Description	CONSTRUCTION	FIBER TYPE x	FIBER COUNT yy
Standard tactical	GMTTxyy	SM G657A1 = A	02
Heavy Duty tactical	GMRTxyy	SM G657A2 = F	04
		OM2 = 2	06
		OM3 = D	08
		OM4 = E	12
			16 for GMTT only
			24 for GMTT only

Examples:

GMTTA12	12 x SM G657A1 fibers in standard tactical version	
GMRTE08	8 x OM4 fibers in heavy duty tactical version	