

ST Connectors For Military and Industrial Use



ST Connector & Adapter

About MIL-ST

Amphenol Fiber Systems International (AFSI) offers rugged military fiber optic ST connectors for deployable and fixed communication system requirements. AFSI's connectors are designed to provide the best possible optical performance in applications with severe environmental conditions.

Various versions of connectors and adapters are available to meet a broad range of specific needs and system requirements. The M83522 connector is qualified for military applications and features a higher spring force than commercial ST connectors, allowing it to meet the shock requirements of MIL-C-83522.

Commercial-off-the-Shelf (COTS) ST connectors provide the same robustness with a spring force more consistent with commercial ST connectors, enabling them to connect effectively with other ST connectors and ancillary electronics.

Features and Benefits

- Super and Ultra-PC polish capabilities
- High grade stainless steel body (17-4 SS) with zirconia ceramic ferrule and fungus-resistant self-extinguishing boot
- Superior optical performance in extreme environmental conditions
- MIL-qualified series: high spring force for shock and vibration resistant critical in military applications
- Navy approved COTS: for moderate shock and vibration environments

Options

- M83522/16- DNX, DNY
- MSTC1100, MSTC2100 (Navy Approved COTS)
- M83522/17- NY

Applications

- US Navy shipboard, surface and submarine, mission critical combat and communications systems
- Mobile tactical shelters
- Electronic battlefield networks
- Mobile emergency telecommunications stations
- Deployable outdoor, harsh environment

Materials

- Ferrule: zirconia
- Body: stainless steel
- · Boot: fungus resistant, self-extinguishing thermoplastic

How To Order

For more information on how to order or to obtain a price quote on any of our ST connectors, please call us at 800.472.4225. For international calls please dial 1.214.547.2400 or email us at info@fibersystems.com.

About Amphenol Fiber Systems International

Amphenol Fiber Systems International (AFSI) designs, manufactures, markets and supports reliable and innovative fiber optic interconnect solutions that withstand the harsh environments of military, oil & gas, mining and broadcast applications. After more than a decade in business, AFSI continues to uphold its position as a global leader in fiber optic interconnect components and systems such as termini, M28876, MIL-ST, TFOCA and the TFOCA-II[®] connector, which AFSI developed and patented. Altogether, AFSI has delivered millions of fiber optic connectors worldwide. Whenever there is a need for superior cost-effective fiber optic systems and products that will stand up to demanding operating environments, you can rely on AFSI for engineering know-how, top-quality products and expert technical support.

For more information about AFSI, please visit our web site at www.fibersystems.com



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MIL-C-83522 Connector Performance Specifications

Specification	Measurement Requirement
Insertion Loss	< 0.75 dB (MIL-C-83522 allows for < 1.0 dB)
Return Loss	> 30 dB (multimode)
Tensile Loading	> 230 N
Mating Durability	> 500 cycles
Impact	8 times, 1.5 meters
Dust	MIL-STD-202, Method 110
Thermal Shock	MIL-STD-1678, Method 4020
Vibration	MIL-STD-1344, Method 2005
Temperature Humidity	DOD-STD-1678, Method 4030
Salt Spray	MIL-STD-1344, Method 1001
Flammability	MIL-STD-1344, Method 1012
Temperature Cycling	-55°C to 125°C Op, -65°C to +200°C Non-Op
Shock	MIL-STD-901D, Grade A, Type A, Class I
Fungus Resistant	MIL-STD-810, Method 508

ST Connector Typical Performance Specifications

Specification Insertion Loss (typical) Return Loss

Inspection Detail EIA/TIA-455-34, Method A EIA/TIA-455-107

Single Mode	Multimode
-0.2 dB	-0.3 dB
-50 dB	-30 dB

Military ST Connector



Panel Cutout



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Military ST Adapter



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