



2017-18

A WOMAN OWNED SMALL BUSINESS



FIS BLUE

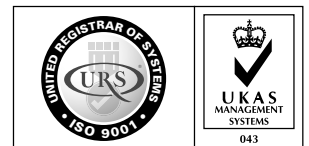
MILITARY FIBER OPTIC SOLUTIONISTS

MINING, OIL & GAS

Get Fiber'ed up!



FIS Blue is an ISO 9001-2008 CERTIFIED quality organization.



URS is a member of Registrar of Standards (Holdings) Ltd.

Cage Code 4RF03

www.fisblue.com

TEST EQUIPMENT

FIS Blue manufactures and distributes many types of fiber optic and electrical test equipment.

FIS Blue offers a variety of test equipment for the Broadcast, Military, Aviation, Telco and Data/LAN markets.

All FIS Blue test equipment is proudly Made in the USA to the highest quality standards and comes with a 1-year warranty.

FIS BLUE POWER METER

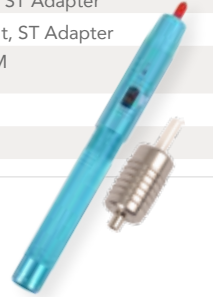
A Fiber Optic Power Meter is the essential tool for measuring optical power within a fiber optic link. The FIS Blue Fiber Optic Hand Held Power Meter offers solid performance, portability and ease-of-use, all at a great price.



FIS BLUE LIGHT SOURCE

The FIS Blue Light Source is the perfect match for the FIS Blue Power Meter. Singlemode units are equipped with lasers having a typical output power of -1.0dBm. Multimode units have LEDs with a minimum output of -17dBm.

PART #	DESCRIPTION
FB-813LR	FIS Blue Power Meter & 850/1300nm MM LED Light Source Kit, ST Adapter
FB-1315LRST	FIS Blue Power Meter & 1310/1550nm SM Laser Light Source Kit, ST Adapter
FB-1835LRVFL	FIS Blue Power Meter & 850/1300nm MM and 1310/1550nm SM Light Sources plus VFL Kit, ST Adapter
FB-9000	FIS Blue VFL, 2.5mm connectors
FB-9000AD	1.25mm adapter for FB-9000 VFL



MODULAR RACKS

FIS Blue now offers the easiest and most complete line of broadcast panels. The offering gives the users total freedom to create the perfect set-up for their needs. The user can mix-n'-match everything from loaded modules to flat and angled plates right in one frame. There is everything from fiber to copper, audio to video and even military style connectors.

- One single frame for flat plates, angled plates and loaded modules
- 8-ports in the 2RU frame
- Heavy duty construction for long life span
- Proudly Made in the USA



CONNECTOR	PLATES AVAILABLE
Blank	Flat
ST	Flat Quad*, Angled Quad*
SC	Flat Quad*, Angled Quad*
LC	Flat Quad*, Angled Quad*
SMPTE	Flat Single, Angled Single, Module*
Neutrik OpticalCON, XLR, EtherCON	Flat Single*, Flat Double*, Angled Single*, Module
BNC	Flat Quad*, Angled Quad*

CONNECTOR	PLATES AVAILABLE
Delphi Hermaphroditic	Flat Single, Angled Single
TFOCA-II / QFOCA	Flat Single, Angled Single
Fischer FiberOptic	Flat Single, Angled Single
Triax (female)	Flat Single, Angled Single
Triax (male)	Flat Single, Angled Single
QMini / HMA Expanded Beam	Flat Single, Angled Single
QMicro / MX Expanded Beam	Flat Single, Angled Single

Other connector styles available upon request!

*Pre-loaded with connectors available

M29504/04 and /05 TERMINI, STYLE 1



SOCKETS

Mil-Spec STYLE 1	Ferrule ID	Fiber Type
M29504/05-4237	125.5µm	9/125µm
M29504/05-4238	126.0µm	9/125µm
M29504/05-4239	126.0µm	50 & 62.5/125µm
M29504/05-4046	127.0µm	50 & 62.5/125µm
M29504/05-4049	142.0µm	100/140µm
M29504/05-4243	236.0µm	200/233µm

PINS

Mil-Spec STYLE 1	Ferrule ID	Fiber Type
M29504/04-4208	125.5µm	9/125µm
M29504/04-4209	126.0µm	9/125µm
M29504/04-4210	126.0µm	50 & 62.5/125µm
M29504/04-4040	127.0µm	50 & 62.5/125µm
M29504/04-4043	142.0µm	100/140µm
M29504/04-4214	236.0µm	200/233µm

ARINC 801, SMPTE and other termini available upon request

M29504/14 AND /15 TERMINI

SOCKETS

PART #	Ferrule ID	Fiber Type
M29504/15-4180	125.0µm	9/125µm
M29504/15-4181	126.0µm	9/125µm
M29504/15-4171	126.0µm	50 & 62.5/125µm
M29504/15-4172	127.0µm	50 & 62.5/125µm
M29504/15-4175	142.0µm	100/140µm

PINS

PART #	Ferrule ID	Fiber Type
M29504/14-4140	125.0µm	9/125µm
M29504/14-4141	126.0µm	9/125µm
M29504/14-4131	126.0µm	50 & 62.5/125µm
M29504/14-4132	127.0µm	50 & 62.5/125µm
M29504/14-4135	142.0µm	100/140µm

DUMMY

M29504/3-4038



PUMA ADAPTERS

- Rugged and economical solution for field use
- Use to interconnect equipment with standard ST or LC connectors where only multi-channel connections exist
- Adapt any 2 or 4-channel (Singlemode or Multimode) multi-channel connector to ST or LC
- Available in all 2 and 4-channel connectors that FIS Blue carries
- Singlemode, 62.5µm OM1 and 50µm OM2/3/4 are available
- Please call if your configuration is not listed

► For current spec sheets and further details, go to www.fisblue.com

TERMINI

FIS Blue offers a full line of fiber optic termini.

We carry all types of termini under the

M29504 Mil-Spec designation. In addition, we stock ARINC 801 and SMPTE termini.



PUMA ADAPTERS

FIS Blue now manufactures a full line of hybrid adapters, allowing the user to easily adapt from SMPTE, TFOCA-II/QFOCA, Expanded Beam, Fischer and other multi-channel connectors to a ST or LC connector.

ASSEMBLIES

FIS Blue is capable of all types of harsh environment cable assemblies. From M28876 and D38999 to Expanded Beam and TFOCA-II/III assemblies. FIS Blue is the premier fiber optic cable assembly house for harsh environment assemblies.

TFOCA-II/QFOCA CABLE ASSEMBLIES

Fiber optic cables serve many important purposes in the military, mining, oil and gas industries. One of the most important is distance. The unique characteristics of fiber make it the "go-to" solution for long distance transmissions. FIS Blue has the industry's quickest turnaround times on TFOCA and QFOCA Cable Assemblies. Since FIS Blue also produces the Tactical Cable itself, the pricing on our cable assemblies is very competitive.

- TFOCA and QFOCA are designed to withstand repeated handling and mating cycles typically required for rapid deployment and retrieval
- Hermaphroditic design for Multimode or Singlemode fiber



TFOCA-III

TFOCA-III connectors are available in 6 and 24-channel configurations, both Multimode and Singlemode. Many of the benefits are the same as the TFOCA-II: hermaphroditic connectorization, removable insert cap and harsh environment operational.



CONNECTOR CHART

CHANNELS	ST (UPC)	SC (UPC/APC)	LC (UPC/APC)	FC (UPC/APC)	LC / ODVA	TFOCA-II / QFOCA	TFOCA-III	Delphi Hermaphroditic	Expanded Beam MIL-PRF-83526/20	Micro (MX) Expanded Beam	M28876	MIL-DTL-38999	QSeal (OpticalCON)	Fischer Fiber Optic	SMPTE 304 (LEMO / Canare)	Q-Drive / StranGen-X
1-fiber	X	X	X	X										X		
2-fiber	X	X	X	X	X				X	X		X	X	X		
2-fiber / 2-copper														X		
2-fiber / 4-copper															X	
4-fiber	X	X	X	X		X		X	X	X	X	X	X	X		X
4-fiber / 8-copper																X
5-fiber	X	X	X	X								X				
6-fiber	X	X	X	X			X				X					
8-fiber	X	X	X	X							X	X				
11-fiber	X	X	X	X								X				
12-fiber	X	X	X	X		X		X								X
16-fiber	X	X	X	X								X				
18-fiber	X	X	X	X							X					
21-fiber	X	X	X	X								X				
24-fiber	X	X	X	X			X									
29-fiber	X	X	X	X								X				
31-fiber	X	X	X	X							X					
37-fiber	X	X	X	X								X				
	All Industries Non-Rugged					Broadcast, Military, Mining/Oil/Gas					Military, Navy	Broadcast, Military-Aero	Broadcast		Mining/Oil/Gas	



FISCHER CABLE ASSEMBLIES

Fischer Fiber Optic push-pull connector solutions are built to withstand the elements of rugged and harsh environments, providing virtually faultless performance. Extreme Environmental Robustness: IP68 ingress protection when mated or with caps and IP67 sealing even unmated. In addition, extensive vibration and shock testing have shown that this is an ultra rugged connector.

To build on the existing line of high quality connectors, Fischer now offers a hybrid 4-channel (2-fiber optic / 2-copper) connector. The electrical contacts can handle up to 10A and 400V. The fiber optic contacts can be terminated with Singlemode or Multimode fibers.

TAC-GRIP

The FIS Blue Tac-Grip Metal Breakout Kit provides a ruggedized solution for terminating tactical distribution (900µm tight buffered) cables. The revolutionary metal construction of the breakout kit ensures the physical safety of each fiber within the assembly. The Tac-Grip is available for 2, 4, 6, 12, 24 fiber cables and uses 3mm color-coded subunits. Together with the protective netting, this breakout kit adds an extra layer of protection to your re-deployable fiber optic cabling.

- 2, 4, 6, 12 & 24 Fiber Breakout Kits
- 36" long 3mm color-coded jacketing
- Metal body and anodizing offers superior durability
- Proudly made in the USA



TACTICAL CABLE ASSEMBLIES

Fiber optic cables have many applications in the military industry. Fiber's distinctive characteristics make it the ideal solution for transmissions needing to travel long distances. FIS Blue's in house manufacturing allows for timely production of Tactical Cable, along with its assemblies, at very competitive prices.

- TFOCA and TFOCA-II are designed to withstand repeated handling and mating cycles typically required for rapid deployment.
- Different connectors available: ST, LC, SC, FC, TFOCA-II, D38999, M28876, Delphi, Expanded Beam and more.
- Custom lengths from 1 to 6,600 feet available.



TFOCA-II® is a registered trademark of Amphenol Fiber Systems International

DELPHI CABLE ASSEMBLIES

Delphi's hermaphroditic connectors provide superior, consistent optical performance when deployed in the harshest environments. The connectors allow "daisy-chaining" of cable assemblies to extend equipment runs without concern for connector male/female interface compatibility.



- Available in 4 and 12 channel configurations
- 4 channel connector complies with SMPTE Standard 358M-2001 for the broadcast industry
- Plug-to-plug in-line cable linking system
- Waterproof and field maintainable



M28876 CABLE ASSEMBLIES, 4 TO 31-CHANNEL

For rugged fiber optic military applications that require higher fiber counts, the M28876 is a good solution. The M28876 connectors come in a variety of fiber counts from 4 to 31 and vary in shell size from 13 - 23. There are a diverse amount of connector styles. These are offered in plug, jam-nut receptacle and flange mount receptacle. In addition, each of these have different options for the strain relief/backshell: none, straight, 90° and 45°.



EXPANDED BEAM CABLE ASSEMBLIES

FIS Blue is an accomplished manufacturer of Expanded Beam fiber optic cable assemblies. Expanded Beam connectors are very desirable in dirty and harsh environments. The lens technology allows the connectors to work in "less than perfect" conditions. Available in singlemode or multimode and 1 to 4 channels. Connector options include Plug, Jam-Nut Receptacle and Flange Mount Receptacle. All connectors are proudly made in the USA.

FIS BLUE CABLE REELS

FIS Blue offers specially designed steel cable reels to transport or store your broadcast and fiber application. In addition to the standard broadcast reels, high quality OCC, Schill, Shane and Hannay reels are offered. The Schill reels offer many sizes and options to fit any application. For military applications, the Shane reels are the industry leader.



OCC
OPTICAL CABLE CORPORATION

SHANE
INDUSTRIES

▷ CABLE ASSEMBLIES CAN BE BUILT TO YOUR CUSTOM SPECIFICATIONS

MINING, OIL & GAS

A full inventory of connectors, cable and cable assemblies are being offered for the Mining, Oil and Gas industries.

Custom cable assemblies are available in multiple configurations, including 12-channel (8-fiber / 4-copper).

Let FIS Blue be your main supplier of fiber optics for Mining, Oil and Gas environment assemblies.



QPC Q-DRIVE CONNECTORS

QPC now offers a complete line of connectors for the Mining, Oil and Gas industries. Based on their proven QFOCA platform, there are 4 and 12-channel fiber optic Q-Drive connectors. They come complete with enhanced cable strain relief and stainless steel Kellems grips. These are hermaphroditic connectors that are 100% inter-mateable with the Amphenol Top-Drive and Stran Technologies GenX connectors. Additionally, a 12-channel (8-fiber optic termini and 4-copper contacts) Q-Drive connector is also available.



STRAN TECHNOLOGIES GenX CONNECTORS

The GenX line of connectors is a time tested solution and widely accepted. The GenX is available in standard 4-channel fiber optic and 12-channel (8-fiber optic termini and 4-copper contacts). The copper contacts are rated at 600 volts. These connectors are hermaphroditic which allow for easy in-field daisy chaining of longer cable runs. The plug connectors feature a stainless steel Kellems cable grip for added strength and durability. The receptacles have a 'centralizing shroud' to ensure damage free matings.

CABLE ASSEMBLIES

FIS Blue can offer a variety complete cable assembly solutions. Customers can choose from a variety of QPC Q-Drive and Stran Technologies GenX connectors. A variety of special cables are available for all applications. Those listed below are only a few examples of what is available. Call for your custom configuration!



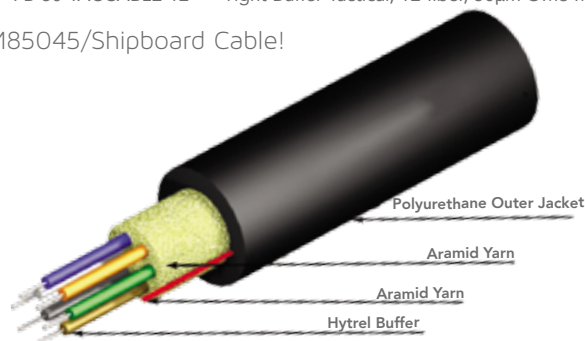
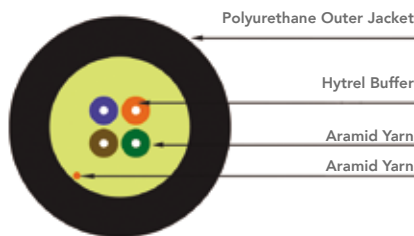
BULK CABLE

In-house production allows us to offer competitively priced Tactical Cable Assemblies and Bulk Tactical Cable. Tactical Cable utilizes a rugged polyurethane outer jacket. There are several fiber counts and fiber type options available. FIS Blue also has the ability to run custom fiber counts, color and print cable if needed. Private label bulk cable is also available. In addition to the in-house line of FIS Blue Tactical Cable, other brands are available.

TACTICAL CABLE

PART #	DESCRIPTION
FB-SM-TACCABLE-2	Tight Buffer Tactical, 2-fiber, SM
FB-SM-TACCABLE-4	Tight Buffer Tactical, 4-fiber, SM
FB-SM-TACCABLE-6	Tight Buffer Tactical, 6-fiber, SM
FB-SM-TACCABLE-12	Tight Buffer Tactical, 12-fiber, SM
FB-MM-TACCABLE-4	Tight Buffer Tactical, 4-fiber, 62.5µm MM
FB-MM-TACCABLE-12	Tight Buffer Tactical, 12-fiber, 62.5µm MM
FB-50-TACCABLE-2	Tight Buffer Tactical, 2-fiber, 50µm OM3 MM
FB-50-TACCABLE-4	Tight Buffer Tactical, 4-fiber, 50µm OM3 MM
FB-50-TACCABLE-6	Tight Buffer Tactical, 6-fiber, 50µm OM3 MM
FB-50-TACCABLE-12	Tight Buffer Tactical, 12-fiber, 50µm OM3 MM

FIS Blue stocks multiple configurations of M85045/Shipboard Cable!



Introducing
our new
**SLIM-TAC
CABLE!**

NEW! SLIM-TAC CABLE

FIS Blue introduces Slim-Tac, our new line of fiber optic tactical cable and SMPTE cable. Slim-Tac tactical/broadcast cable is offered in 12 fiber and our newest 24 fiber count!

- Tac 12 reduced to 5.0mm
- Tac 24 reduced to 6.2mm
- SMPTE reduced to 7.0mm with full power

PART #	DESCRIPTION
FB-SM-TACCABLE-12-S*	FIS Blue 12-fiber SM Slim-Tac, single mode
FB-SM-TACCABLE-24-S*	FIS Blue 24-fiber SM Slim-Tac, single mode
FB-SMPTECABLE7	FIS BLUE 7.0mm SMPTE Slim-Tac



NEW!
Slim-Tac
Tactical Cable

Standard
Tactical
Cable



*PATENT PENDING

FIS BLUE BASIC & DELUXE CLEANING & TOOL KITS

FIS Blue has an extensive range of tools, cleaning supplies, test equipment and kits. The kits are meant to be a universal tool and cleaning solution for all types of fiber optic connectors. Whether an ST, SMPTE or TFOCA-II connector needs its ferrules cleaned, these kits can handle the job.

The Deluxe Tool & Cleaning Kits with Testers include all of the standard items from the Basic Kits, plus additional hand tools and a Power Meter and Light Source Kit.



PART #	DESCRIPTION
FB-BAMIL-KIT	FIS Blue Basic Military Cleaning & Tool Kit
FB-BAMIL-KIT-TFCTY	FIS Blue Basic M29504/16 (TFOCA-II) Kit with Continuity Tester
FB-BAMIL-KIT-DLCTY	FIS Blue Basic M29504/14 /15 (M28876 & Delphi) Kit with Continuity Tester
FB-BAMIL-KIT-D3CTY	FIS Blue Basic M29504/04 /05 (D38999) Kit with Continuity Tester
FB-DXMIL-KIT	FIS Blue Deluxe Military Testing & Cleaning Kit with Power Meter & Light Source for M29504/04, /05, /14, /15, /16

FIS BLUE CLEANING SUPPLIES

All your fiber optic cleaning supplies are available at FIS Blue. From sticks and wipes and wet and dry cleaning solutions, there is a solution for everyone. Below is a small part of the offering. Please call for more options!



▲ Part # FB CCP-50

PART #	DESCRIPTION
MCCS25	Sticklers CleanStixx, 2.5mm sticks, 50pk
MCCS16	Sticklers CleanStixx, 2.0/1.6mm sticks, 50pk
MCCS12	Sticklers CleanStixx, 1.25mm sticks, 50pk
MCCXMT	Sticklers CleanStixx, Lens sticks, 50pk
MCCP25	Sticklers CleanStixx, Lens/Ferrule sticks, 50pk
FB-CCP-50	Fiber Optic Contact Cleaners (1x dry & 1 wet swab), 50pk
34155	Kim Wipes Box, single box
POC03M	Sticklers Fiber Optic Connector Cleaner, single can

ONE-CLICK CLEANER



▲ Part # 13310

The US Conec IBC™ Brand Cleaners are mechanical cleaning tools designed to clean connectors residing in an adapter or faceplate and unmated connectors. The IBC™ Brand Cleaning tools use a novel dry cleaning strand to gently sweep and lift away dust and residues from the connector end face.

PART #	DESCRIPTION
12910	One-Click for LC, MU & 1.25mm Harsh Environment Connectors
12926	One-Click for SMPTE 304M & 2mm Harsh Environment Connectors
13310	One-Click for TFOCA II, ST, SC, FC & 2.5mm Harsh Environment Connectors
13309	One-Click M16 1.6mm & D38999 Harsh Environment Connectors

FULL FIBER OPTIC CABLE OFFERING:

- ▷ MIL-PRF-85045 Polyurethane Tactical Cable
- ▷ MIL-PRF-85045/13, /15, /16, /17, /18, /20, /21, /22, /23, /24 Shipboard Cable
- ▷ Standard Polyurethane Tactical Cable
- ▷ ARINC 802 Commercial Aircraft Cable
- ▷ Riser & Plenum Simplex and Duplex Cable
- ▷ Indoor Distribution Cable
- ▷ Indoor/Outdoor Tight Buffer Cable
- ▷ Outdoor Loose Tube Cable
- ▷ Ribbon Cable
- ▷ Interlocking Armored Cable
- ▷ All fiber types offered: Singlemode, OM1 62.5um, OM2 50um, OM3 50um & OM4 50um, 100/140um and 200/230um Multimode



▷ For current spec sheets and further details, go to www.fisblue.com



FIS Blue
 161 Clear Road, Building 1
 Oriskany, NY 13424 USA

FIBER OPTIC RESEARCH PARK



Have something that needs fixing? Let FIS Blue diagnose and repair.

Our repair service is perfect if you want to save time and money. Some tactical cable assemblies cost thousands of dollars, so it's smart to know your options. You can ship your SMPTE or tactical cable assembly to us and we can repair it for a fraction of what it might cost you to replace it.

Our service includes evaluation, repair, and testing to make sure your cable assembly is going to do the job right for you.

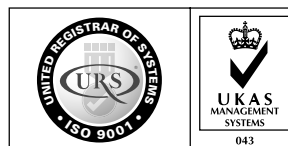


On-Site Training

FIS Blue is proud to now offer a comprehensive one-day hands-on training. Students will be able to learn about the basics and theory of fiber optics. Then, move right into the handling, cleaning and testing of fiber optic cables that use Military and Broadcast style connectors. Training focuses on:

- SMPTE, TFOCA-II®, Delphi, Fischer LC-ODVA and Expanded Beam cable assemblies
- Certificate of Completion will be provided upon conclusion of training.

FIS BLUE is an ISO 9001-2008 CERTIFIED quality organization. We pride ourselves on this fact, and work to exceed these standards each day in order to ensure your project is a success.



URS is a member of Registrar of Standards (Holdings) Ltd.

Cage Code 4RF03

161 Clear Road, Building 1
 Oriskany, NY 13424 USA
 Toll-free: 877-347-0091
 Tel: 315-768-8179
 Email: info@fisblue.com

www.fisblue.com