

# TAC-2000 SERIES

Tactical Military and Field Deployable Fiber Optic Cable and Spool Assemblies



#### SUMMARY -

- Custom military grade, tactical fiber optic cable assemblies with up to 12 fibers.
- Available with 2, 4, 8 and 12 Fiber Channels. Larger fiber channel counts available.
- Delphi-Packard Hughes Hermaphroditic multi-channel tactical fiber optic connectors.
- US Army TFOCA-II® multi-channel tactical fiber optic connectors.
- ITT Industries Cannon FOMC multi-channel tactical fiber optic connectors.
- Standard lengths include 500, 1000 and 2000 feet. Custom lengths available.
- Crush-resistant and resilient with a thick layer of Aramid Strength Members.

- Polyurethane jacketed for abrasion, cut and chemical resistance.
- Re-enforced Kevlar jacket strong enough to withstand the weight of a truck or tank.
- Panel mount Tactical Fan-out or Break-out adapters available
- Fan-outs available with break-outs to standard ST, SC, FC, LC and MTRJ type connectors.
- Hand tighten cable Fan-outs (non panel-mount) are available.
- Interfaces available for the complete MULTIDYNE fiber optic product line including the NEW LiGHTBoX.
- Ideal for temporary field production, ENG, sporting events and military operations.

Delphi/Packard Hughes Connector and Fan-out Cable





TFOCA-II® Tactical Connector and Fan-out Cable





#### TFOCA-II® to FOMC Fiber Optic Cable Adapter



# **Multi-Channel Fiber Optic Cable Assemblies**

MultiDyne provides custom cable assemblies for virtually any applications. Our stringent quality system, certified to MIL-STD-790, ensures the highest levels of workmanship and performance available today in every cable assembly built.

Cables can be built with:

- TFOCA connectors
- TFOCA-II® connectors
- TFOCA-III™ connectors
- FOMC connectors
- Delphi-Packard Hughes Hermaphroditic
- THD connectors
- FS3H connectors
- FS12H pier side connectors
- M28876 connectors
- D38999 connectors
- MIL-ST, or any commercially available connector.

MultiDyne can support virtually every connector standards. In addition to 100% optical performance testing, MultiDyne can also provide value-added services such as thermal cycling, high-temperature aging, and other post-build environmental testing.

- MultiDyne uses CECOM approved sources for TFOCA Cable Assemblies.
- MultiDyne uses CECOM approved source for TFOCA-II® Cable Assemblies.
- MultiDyne assemblies are certified to MIL-STD-2042 for shipboard assemblies.

## Every MultiDyne cable assembly is covered by a 1-Year Warranty from the date of delivery.

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

"TFOCA-III is a trademark of Amphenol Fiber Systems International."









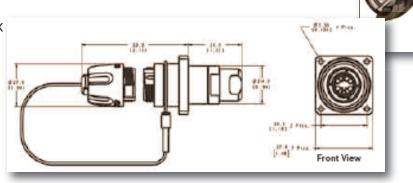
# the LIGHTBOX

# **Optical Connector Options for Tactical Fiber**

**COMPATIBLE WITH: LiGHTBoX & Tac Fiber** 

#### TYCO EXPANDED BEAM

- · Expanded beam technology for easy cleaning and reliability
- 2 or 4 fiber configuration
- · Hermaphroditic for chaining one cable to the next
- · Small and light weight for portable applications
- Singlemode or multimode
- Cable end mates to LiGHTBoX



## TFOCA-I & TFOCA-II

- TFOC-I two fiber & TFOC-II four fiber connectors & cables
- Military grade
- · Hermaphroditic for chaining one cable to the next
- 12 & 24 fiber assemblies available
- · Singlemode or multimode
- · Cable end mates to LiGHTBoX and panel mount recepticle

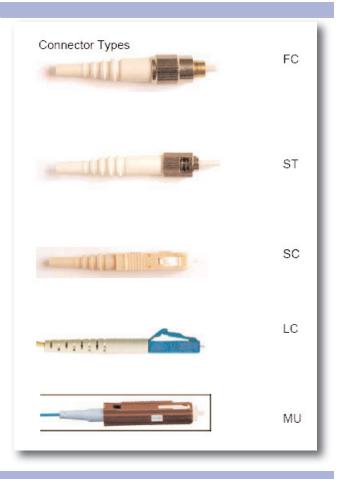






## OTHER CONNECTOR TYPES

- Other connector types include: FC,ST,SC,LC,MU & more
- Any of these types can be terminated onto TAC fiber
- LiGHTBoX can be fitted with any of these connector types



# REEL TYPES

# On the right:

• Rugged steel & aluminum constructionor reinfo

• Equipped with Cam-Lock drag brake system

· Split reel available for short leader

· Back-pack option for field use

· Customer specified reel types

#### On the left:

- · Reinforced extruded glass nylon
- Cable payout & storage area
- · Connector storage
- · Cleaning kit compartment







# DEPLOYABLE FIBER OPTIC REEL AND BASE SYSTEM

MultiDyne Video & Fiber Optics is pleased to introduce the 1st deployable reel system to accommodate the unique demands of deployable fiber optic cable. The AOS fiber optic reel system incorporates many features unique to fiber optics and not afforded by current metal style reels.

## Applications

- Mobile Emergency Telecommunications Stations
- Mobile Tactical Shelters
- United States Army, Navy, and Marine Corp military tactical deployments
- Broadcast
- Emergency Restoration and Deployable Communications

Features	Benefits		
Fabricated with reinforced Extruded	Provides durability and strength while affording light weight benefits		
Glass Nylon	Eliminates rust resulting from field operation		
Integrated Cable payout and storage area	Enables operators to payout smal lengths of fiber cable without having to un spool the entire payload		
Designed with Integrated Inter- Locking System	Enables reels to be stacked and inter-locked during transit		
Integrated Connector Storage and	Affords multi-channel cylindrical connectors to be stored, locked in place for transit		
Cleaning Kit Compartment	Affords operators with the built-in fiber optic connector cleaning kit, to maintain connectors during deployable situations		
Light weight Retractable crank and Handle system	Allows operators to easily rotate reel in payout or take-up situation and store handle during transit		
Designed in accordance with CECOM Drawing A3159864E	Fiber Optical Reel designed to be form, fit and function with existing reel systems		
Tested in accordance with Military specifications for Cable Reels, MIL-R-3241E (Pending)	Fiber Optic Reel Designed meet or exceed all requirements of MIL-R-3241E		
Integrated Transit Case, Vehicle Payout Axial and Base systems	AOS Fiber Optic Reels feature options for integrated transit case and deployable "A" frame base to accommodate most configurations		

Deployable Fiber Optic Reel meets the challenge of today's harsh environment by offering an integrated solution to clean and maintain multi-channel cylindrical fiber optic connectors in the field. AOS reels can be ordered from a variety of popular cleaning kits including MIL-DTL-83526, MIL-PRF-28876, NAVSEA PierSide, MIL-C-83526 TFOCA, F-LINK™ and TFOCA-II®. Kits are available for 4,6,8,12,18 and 24 channel style connectors. MultiDyne

AOSREEL001-9/2007







PART NUMBER	OUTER DIAMETER	HUB DIAMETER	WIDTH (W)	WEIGHT (est.)	CAPACITY (6mm dia.)	CAPACITY (7.2mm dia.) TAC
TAC-0100-X-Y	17"	10"	5"	10LBS	100M	66M
TAC-0300-X-Y	17"	8"	8"	11LBS	300M	200M
TAC-0500-X-Y	17"	8"	9.5"	12LBS	500M	340M
TAC-0750-X-Y	17"	8"	10.50"	13LBS	750M	495M
TAC-1000-X-V	17"	8"	17.50"	14LBS	1000M	690M
TAC-2000-X-V	17"	8"	19.50"	16LBS	2000M	1380M

	(Y)=INTEGRATED
	CLEANING KITS
Мт	COTS M83526 STYLE A©ONNECTORS
N	M28876 STYLE CONNECTORS
Р	NAVSEA 7379171 & 7379172 STYLE CONNECTORS
Н	HERMAPRODITIC STYLE CONNECTORS
F	F-LINK™ FAMILY OF CONNECTORS
A	AMPHENOL TFOCA-II®
Т	TFOCA
X	NONE INCLUDED

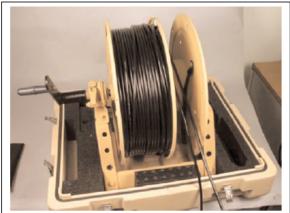
(X)	=COLOR
T	DESSERT TAN
В	BLACK
G	CARC GREEN

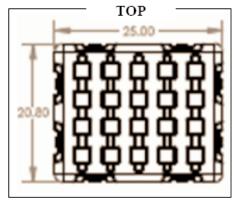
## INTEGRATED TRANSIT CASE & REEL SYSTEMS

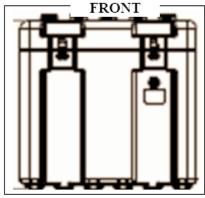
MultiDyne offers a full range of integrated transit case solutions for TAC Series reels. We utilize case design based on Loadmaster™ Rotomolded LLDPE Thermoplastic technology featuring modular "Clam Shell" designs, case-to-case stacking capability, removable/hinged covers, recessed draw pull latches, handles and pressure relief valve. These Rotomolded cases are custom fit to TAC series fiber optic reels. The combination of "light weight" case material and fiber optic reel afford the best weight efficiency within the industry.

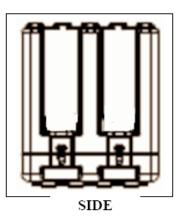
In addition to custom transit case designs, We also designs integrated fiber optic cleaning kits into each case as an option. Choice of fiber optic cleaning kits include: MIL-C-83526 (TFOCA), M28876, NAVSEA 7379171 & 7379172, 4CH Hermaphroditic, F-Link™, & MIL-DTL-83526 (TFOCA-II®) style connectors.











ATACREEL001-9/2007





# M-LINK SERIES

Rugged, Facility and Field Deployable Fiber Optic Cable Assemblies



# MultiDyne M-LINK™ FLEXIBLE INTER-CONNECT SYSTEM

Perhaps the most innovative fiber optic and electrical inter-connect solution to come along in years, MultiDyne has introduces the M-LINK™ connector family, the ultimate configurable fiber optic or hybrid (combination fiber optic and electrical) inter-connect solution to meet the majority of commercial, industrial and military application needs. This Patented (pending) connector platform starts with configurable pin or socket insert caps which can be added to either plug or receptacle. A series of modules are then provisioned into either male or female cavities to form an active channel for fiber pins, fiber optic sockets, electrical pins, electrical sockets or dummy modules to seal un-wanted cavities. Combined with M-LINK™ hybrid cable or fiber optic cable style back shells, the M-LINK™ system can also accommodate any configuration up to 32 channels, with any combination of fiber optic or #16 AWG electrical contacts.

Connectivity Environment: HYBRID/FIBER OPTIC FIXED NETWORK MIL Specification References: PROPRIETARY

Channel Count: 2 - 7 CHANNELS

Description: MultiDyne HIGH PERFORMANCE MULTI-CHANNEL

FIBER OPTIC INTER-CONNECT SYSTEM

Termini Information: M-LINK™ FIBER OPTIC TERMINI

M-Link Rugged Receptacle



M-Link Rugged Connector and Fan-out Assembly



# MultiDyne P/N DESCRIPTION

MDA-x-yy-ww-A110z 7CH - M-LINK™ PLUG, MALE W/STRAIGHT BACKSHELL

MDB-x-yy-ww-A110z 7CH - M-LINK™ PLUG, FEMALE W/STRAIGHT BACKSHELL

MDC-x-yy-ww-A100N 7CH - M-LINK™ IN-LINE RECEPTACLE, MALE
MDD-x-yy-ww-A100N 7CH - M-LINK™ IN-LINE RECEPTACLE, FEMALE
MDE-x-yy-ww-A100N 7CH - M-LINK™ PANEL MNT RECEPTACLE, MALE
MDF-x-yy-ww-A100N 7CH - M-LINK™ JAM NUT RECEPTACLE, MALE
MDH-x-yy-ww-A100N 7CH - M-LINK™ JAM NUT RECEPTACLE, FEMALE

MTP2042DD01 M-LINK™, FIBER OPTIC TERMINI, NON-GENDER, 1.25mm FERRULE

MUV164016AA PIN CONTACT, ELECTRICAL, 16 #AWG
MUV164116AA SOCKET CONTACT, ELECTRICAL, 16 #AWG

## **DESCRIPTION**

(x) = n, NOT USED

(x) = 1, 16 AWG W/O GRD

(x) = 2, 16 AWG W/ GRD

(x) = 3, 10 AWG W/O GRD

(x) = 4, 10 AWG W/ GRD

(yy) = 01-07 ELECTRICAL

(ww) = 01-07 FIBER OPTIC

(z) = A, "0.190 -









