

## TrueNet®

### Plug-and-Play Microcable Trunk Assemblies



ADC's TrueNet® plug-and-play microcable trunk assemblies are round 12 fiber optical trunk cables pre-terminated with a high-density MPO connector on both ends. They can be used in conjunction with any of the other plug-and-play connectivity products to rapidly deploy fiber into a data center or Local Area Network (LAN). The TrueNet Microcable assemblies can simply be plugged into any plug-and-play cassette in the optical distribution frame or fiber enclosure which eliminates the need for on-site fiber termination and preparation.

#### Features:

- Available with 3 mm and 5.5 mm cables
- Round design eliminates preferential bend issues which results in increased density and greater manageability
- Compatible with ADC's FiberGuide® Optical Raceway system to add increased protection and manageability
- 5.5 mm diameter consists of a round Kevlar reinforced cable with integrated MPO strain relief and pulling pod

SPEC SHEET



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## Polarity Made Simple

One of the most common questions regarding MPO deployments is how the system design addresses the polarity issue of the fiber. ADC's TrueNet system employs the recommendations made in TIA standard TIA-568-C.

The TrueNet plug-and-play trunks utilize a key up/key down fiber array as noted in TIA-568-C, and TrueNet plug-and-play cassettes are wired straight through. In addition, the TrueNet duplex jumpers have a duplex clip that is easily removed for polarity changes in the field.

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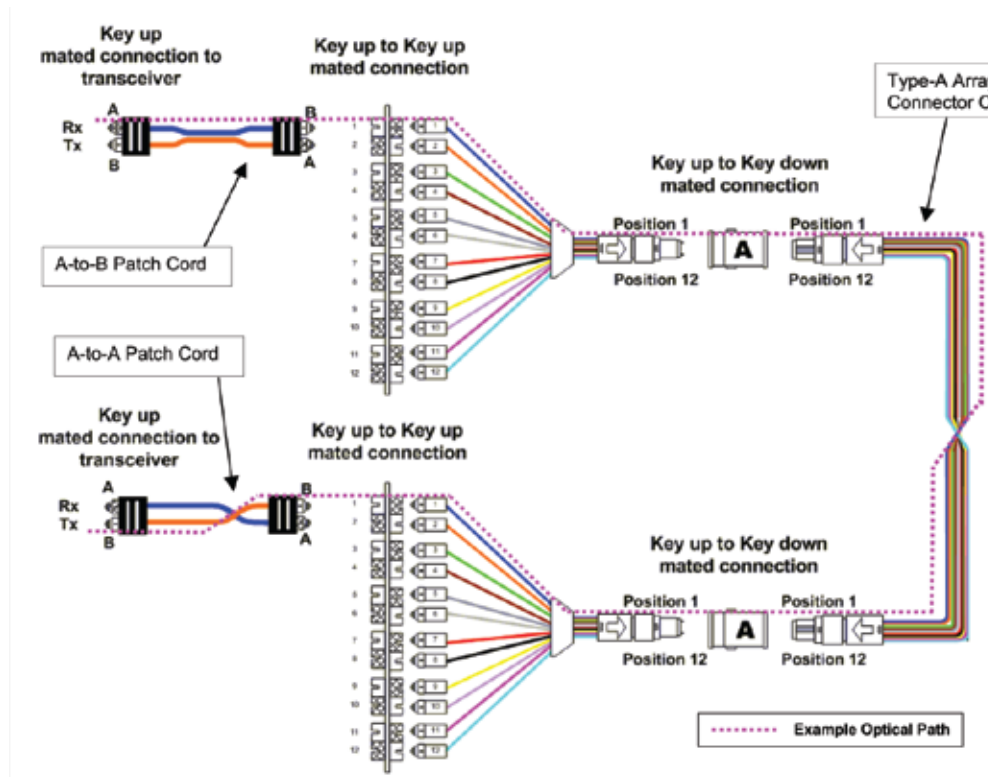
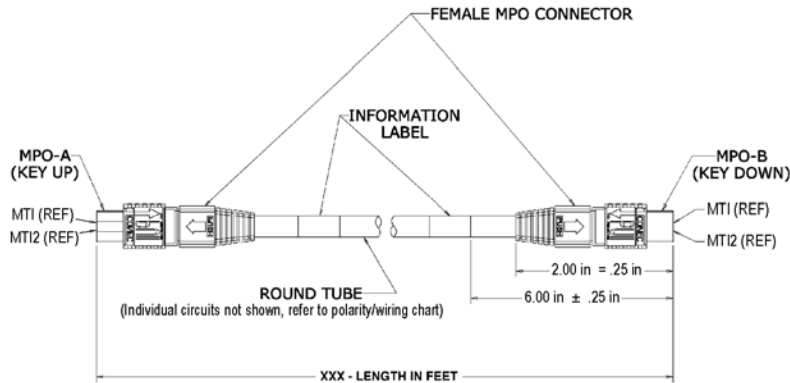


Figure 1: Connectivity Method A for Duplex Signals



# TrueNet® Plug-and-Play Microcable Trunk Assemblies

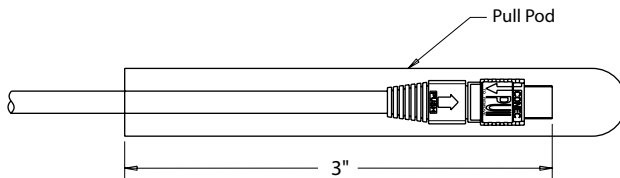
## Specifications



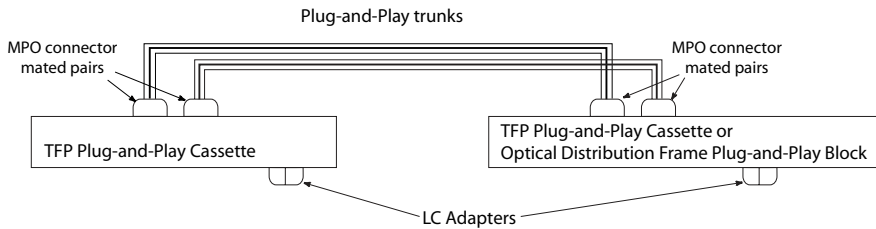
### Polarity / Wiring Scheme

MPO – A	MPO – B	Fiber Color
MT1	MT1	Blue
MT2	MT2	Orange
MT3	MT3	Green
MT4	MT4	Brown
MT5	MT5	Slate
MT6	MT6	White
MT7	MT7	Red
MT8	MT8	Black
MT9	MT9	Yellow
MT10	MT10	Violet
MT11	MT11	Rose (Pink)
MT12	MT12	Aqua

### PULLING POD DIMENSIONS (5.5 mm only)



### OPTICAL SPECIFICATIONS



	850nm	1310nm
<b>Module Loss (measured through MPO mated pair to LC adapter)</b>		
<b>Insertion Loss</b>		
Maximum	0.7 dB	1.0 dB
Typical	0.25 dB	0.4 dB
<b>Return Loss</b>		
Maximum	—	-55 dB
<b>Trunk Loss (per meter)</b>		
Maximum	.0035 dB	.001 dB
<b>Channel/Link Loss with 31 meter trunk (100 feet) (as in figure above)</b>		
Maximum	1.1085 dB	2.031 dB
Typical	0.6085 dB	0.831 dB

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**ENVIRONMENTAL CHARACTERISTICS**

**Storage Temperature:** -40° to 70° C (-40° to 158° F)  
**Operating Temperature:** 0° to 70° C (-32° to 158° F)  
**Installation Temperature:** 0° to 70° C (-32° to 158° F)

**COMPATIBILITY WITH FIBERGUIDE**

	Microcable Plug-and-Play Trunk	
	3.0 mm	5.5 mm
<b>Recommended patch cord density (per in<sup>2</sup>)</b>	40	10
<b>Maximum patch cord density (per in<sup>2</sup>)</b>	44	12

**ADC RECOMMENDED DENSITY**

Trough Pile-up	FiberGuide System											
	3.0 mm						5.5 mm					
	2x2	2x6	4x4	4x6	4x12	4x24	2x2	2x6	4x4	4x6	4x12	4x24
2-inch	160	480	320	480	960	1920	40	120	80	120	240	480
3-inch	-	-	480	720	1440	2880	-	-	120	180	360	720
4-inch	-	-	640	960	1920	3840	-	-	160	240	480	960

**MAXIMUM DENSITY**

Trough Pile-up	FiberGuide System											
	3.0 mm						5.5 mm					
	2x2	2x6	4x4	4x6	4x12	4x24	2x2	2x6	4x4	4x6	4x12	4x24
2-inch	176	528	352	528	960	2112	48	144	96	144	288	576
3-inch	-	-	528	792	1584	3168	-	-	1244	216	432	864
4-inch	-	-	704	1056	2112	4224	-	-	192	288	576	1152

**Ordering Information**

Description	Catalog Number <sup>1</sup>
<b>50/125 multimode laser optimized to 300 meters, plenum jacket</b>	
3 mm 12-fiber microcable; MPO (no pins) – MPO (no pins) trunk; no pulling pod	MRM-AF/AFJGXXXF
5.5 mm 12-fiber microcable; MPO (no pins) – MPO (no pins) trunk; pulling pod	MRM-AF/AFEGXXXF
<b>Singlemode reduce water peak fiber, plenum jacket</b>	
3 mm 12-fiber microcable; MPO (no pins) – MPO (no pins) trunk; no pulling pod	MRE-AF/AFJAXXXF
5.5 mm 12-fiber microcable; MPO (no pins) – MPO (no pins) trunk; pulling pod	MRE-AF/AFEAXXXF

<sup>1</sup>XXX = length in feet

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