

# NetClear®

## STRUCTURED CABLING

**Berk-Tek®**  
A NEXANS COMPANY

**legrand®**

Ortronics



## MM10 Fiber Optic Solutions

NetClear® MM10 fiber optic solutions feature Berk-Tek GIGALite™-10 and GIGALite-10XB multimode fiber, guaranteed to support 10 Gigabit Ethernet to industry leading distances, and Ortronics connectivity for industry-leading insertion-loss performance. They are engineered for high-speed performance in data centers/storage area networks

(DC/SAN), the horizontal, backbone, and campus fiber optic structured cabling system.

### THE NETCLEAR ADVANTAGE

NetClear cabling systems offer exceptional performance at every level. The expertise of Berk-Tek in advanced cabling, and Legrand | Ortronics in superior connecting hardware, combine to

create system solutions second to none. You get perfectly matched components, optical channel performance over distances exceeding specification requirements, and the support of a proven, reliable partnership ensuring a structured cabling system that simply works better.

### NETCLEAR MM10 SYSTEM PERFORMANCE

The NetClear MM10 fiber solution was developed to facilitate advanced network requirements. NetClear MM10 offers DC/SAN, horizontal, backbone, and campus fiber solutions that guarantee performance and network longevity. The NetClear MM10 solution is supported by Berk-Tek GIGALite-10 and -10XB optical fiber, which provides superior performance for 10 Gb/s applications (at 850 nm) by ensuring specifications that meet or exceed industry requirements.

### THE NETCLEAR MM10 PERFORMANCE GUARANTEE

**Exceptional Performance**  
NetClear MM10 solutions guaran-

tee performance well beyond the IEEE and Fibre Channel distance limitations for standard multimode fiber optic cable.

**Full Standards Compliance**  
ANSI/TIA-568-C.3

**Zero Bit-Error Performance**  
Free from bit errors caused by the NetClear MM10 cabling system.

### Improved Link Loss Budgets

- Superior DMD of GIGALite-10XB offers greater than 25% improvement of link loss budget.
- Premium performance (low loss) cassettes, backbone cables and patch cords enable additional connections and/or greater link length

### Pre-Terminated Trunk Cable Assemblies

Deliver enhanced optical performance and fast deployment.

### Full Peace of Mind

The exceptional technology means guaranteed performance of any application specified to operate over multimode fiber.

### Channel Components

#### Berk-Tek Cable with GIGALite-10, -10XB Fiber

- Pre-terminated cable assembly
- PD Series—Premise Distribution Cable
- Adventum™ Series Indoor/ Outdoor (Riser/Plenum) and OP Series (Outside Plant)
- Micro Data Center Plenum (MDP) Backbone cable

#### Ortronics Connectivity

- OptiMo® Pre-Polished and Anaerobic Field-Installable Connectors
- 615 Series Surface Mount Fiber Cabinets
- FC Series Rack Mount Fiber Cabinets
- TracJack® or Series II® Fiber Modules/Outlets
- OptiMo Fiber Optic Patch and Interconnect Cords
- Momentum® 2 and Momentum 3 Pre-terminated MTP/MPO Cassettes

**Berk-Tek**, A Nexans Company, offers advanced copper and fiber cable for LAN, SAN, data center, security, and outside plant applications. A 50-year tradition of focused engineering combines with the global resources of Nexans to ensure that the company will continue to provide cables with the extra margin of performance and convenience that lead the industry.

**Legrand | Ortronics** is a global leader in high performance network infrastructure solutions, offering a complete range of copper and fiber optic connectivity, as well as Layer Zero™ physical support solutions including Cablofil® wire mesh cable tray and Wiremold® pathways. Whether it's a LAN, SAN, or data center, Legrand | Ortronics keeps you connected to the people and resources that matter most.

MM10

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Delivering  
Reliability.

[www.netclear-channel.com](http://www.netclear-channel.com)

## THE NETCLEAR MM10 GUARANTEE

The industry-leading fiber supplied in the NetClear MM10 solution permits reallocation of a portion of the ISI link penalty to provide additional channel insertion loss up to a total cable plant loss budget of 4.5 dB when using available GIGAlite-10XB fiber up to 300 meters.

1-877-96-CLEAR or [www.netclear-channel.com](http://www.netclear-channel.com)  
for more information

## NETCLEAR MM10 ORDERING INFORMATION

### ORTRONICS® NETCLEAR MM10 COMPONENTS

#### Momentum® 2 Cassettes (4900/500 MHz-km)

STYLE	HEIGHT	PART NO.
10G, 50/125 LC quad, 24 fiber, 2 MTP with pins	1U	OR-M2LCQ24-50E
10G, 50/125 SC duplex, 12 fiber, 1 MTP with pins	1U	OR-M2SCD12-50E

#### Momentum 3 Cassettes (4900/500 MHz-km)\*

STYLE	HEIGHT	PART NO.
10G, 50/125 LC quad, 24 fiber, 2 MTP with pins**	1U	OR-M3LCQ24-50E
10G, 50/125 LC duplex, 12 fiber, 1 MTP with pins**	1U	OR-M3LCD12-50E

\*The rugged metal housing of Momentum 3 offers additional durability with an integral bend limiting spool feature inside to assure optimum optical performance. The Momentum 3 Modular Pre-Terminated System is available in Premium Performance grades for 50 micron LC LOMF products only

\*\*Premium performance (low loss < 0.50) when used with premium performance patch cords and backbone cables

#### OptiMo® Field-Installable Connectors

DESCRIPTION	STYLE	FIBER	PART NO.
No Epoxy/No Polish Zirconia Ferrule (for tight buffered cable)	SC	50/125	OR-205KAS9FA-50T
	LC	50/125	OR-205KAS9GA-50T
	Field Installation Kit	Pre-polished	OR-854B00000-1
Anaerobic Termination, Zirconia Ferrule (ideal for Adventum™ cable)	SC, multimode	Multimode	OR-205KAN9FA-MM
	LC, multimode	Multimode	OR-205KAN9GA-MM
	Field Installation Kit	Anaerobic	OR-85400010
	OptiMo 12 fiber Breakout Kit	—	OR-61500858

#### Fc Series Rack-Mount Patch Fiber Cabinets, Black

ADAPTER PANEL CAPACITY	HEIGHT	TRAY OPERATION	PART NO.
3	1U	Front/Rear Sliding	OR-FC01U-P
6	2U	Front/Rear Sliding	OR-FC02U-P
9	3U	Front/Rear Sliding	OR-FC03U-P
12	4U	Front/Rear Sliding	OR-FC04U-P

#### 615 Series Surface-Mount Cabinets, Beige

ADAPTER PANEL CASSETTE CAPACITY	PART NO.
2	OR-615SMFC-12P
4	OR-615SMFC-24P
8	OR-615SMFC-48P

#### Adapter Panels, Aqua, Ceramic Sleeve

STYLE	FIBER COUNT	PART NO.
SC, Duplex	12	OR-0FP-SCD12LC
LC, Duplex	12	OR-0FP-LCD12LC
LC, Quad	24	OR-0FP-LCQ24LC

#### Fusion Splice Accessories

TYPE	PART NO.
12" Fusion Splice Tray	OR-FST2-F012
40 mm Heat Shrink, Fusion Splice Protection Cover, pack of 50	OR-20500043

#### Fib-Or-Cop II Workstation Outlets

TYPE	PART NO.
TracJack® Fib-or-Cop II, Fog White	OR-62100041
Series II® Fib-or-Cop II, Fog White	OR-62100040

For additional connectivity solutions please visit [ortronics.com](http://ortronics.com)

#### Patch Cords, Duplex

FIBER	CONNECTORS	PART NO.
50/125 Laser Optimized Multimode Fiber	SC to SC	OR-P1DF2LRFZFZxxxM
	LC to LC	OR-P1DF2LRGZGZxxxM

NOTE: xxx=length in meters

#### Patch Cords, Duplex (Premium Performance)

FIBER	CONNECTORS	PART NO.
50/125 Laser Optimized Multimode Fiber	LC to LC	OR-P3DF2LRGZGZxxxM

NOTE: xxx=length in meters

#### Space Saver Patch Cords

FIBER	CONNECTORS	PART NO.
A-B 50/125 Laser Optimized Multimode Fiber	LC to LC	OR-P1DF6LPAZAZxxxM
A-A 50/125 Laser Optimized Multimode Fiber	LC to LC	OR-P1RF6LPAZAZxxxM

NOTE: xxx=length in meters

#### Space Saver Patch Cords (Premium Performance)

FIBER	CONNECTORS	PART NO.
A-B 50/125 Laser Optimized Multimode Fiber	LC to LC	OR-P3DF6LPAZAZxxxM
A-A 50/125 Laser Optimized Multimode Fiber	LC to LC	OR-P3RF6LPAZAZxxxM

NOTE: xxx=length in meters

A full selection of physical support products is available from Ortronics, Wiremold, and Cablofil. For more information, please contact your local sales representative or visit [www.legrand.us](http://www.legrand.us).

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REV.04/10

MM10

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**NETCLEAR MM10 DISTANCE GUARANTEES**  
(in meters)

FIBER TYPE	GIGALITE-10 50/125				GIGALITE-10XB 50/125			
	850 nm		1300 nm		850 nm		1300 nm	
	NetClear	Standard	NetClear	Standard	NetClear	Standard	NetClear	Standard
Fast Ethernet, 100 Mb/s	300	300	2000	2000	300	300	2000	2000
Gigabit Ethernet, 1 Gb/s	1000	550	600	550	1000	550	600	550
Fibre Channel, 2.125 Gb/s	500	480	—	—	600	300	—	—
10G Ethernet, 10 Gb/s	300	300	300	300	600	300	300	—
40/100G Ethernet, 40/100 Gb/s	100	100	—	—	150**	150	—	—

\*\*IEE 802.3ba require Premium Performance components for OM4

BERK-TEK NETCLEAR MM10 COMPONENTS

Optical Fiber Products

CABLE TYPE	FIBER TYPE	FIBERS	BANDWIDTH-EMB, MHz-km (850nm/1300nm)	PART NO.
Horizontal Interconnect (Tight Buffer) Plenum	EB (OM3)	2	2000/500	ICP002EB3010/25
		4	4900/500	ICP004EB3010/25
6		2000/500	PDR006EB3010/25	
12		4900/500	PDR012EB3010/25	
Adventum Indoor/Outdoor (Loose Tube-Dry) Riser		24	2000/500	LTR0X024EB3010/25
		48	4900/500	LTR12B048EB3010/25
Horizontal Interconnect (Tight Buffer) Plenum	XB (OM4+)	2	2000/500	ICP002XB3010/X5
		4	4900/500	ICP004XB3010/X5
6		2000/500	PDR012XB3010/X5	
12		4900/500	PDR012XB3010/X5	
Adventum Indoor/Outdoor (Loose Tube-Dry) Riser		24	2000/500	LTR0X024XB3010/X5
		48	4900/500	LTR12B048XB3010/X5

Pre-Terminated Data Center Cables

STYLE	PART NO.
Micro Data Center, Plenum, 72 Fiber, 50/125 µm (4900/500 MHz) GIGALite-10XB Multimode, Aqua Jacket, MTP Female with 3.0 mm Round, 39 in. Break-Out, MTP Female with 3.0 mm Round, 39 in. Break-Out, Standard PE Pulling End Only - (2" OD), xxx length in feet	BMDP72X77SSPxxx
Micro Data Center, Plenum, 12 Fiber, 50/125 µm (4900/500 MHz) GIGALite-10XB Multimode, Aqua Jacket, MTP Female with 3.0 mm Round, 39 in. Break-Out, MTP Female with 3.0 mm Round, 39 in. Break-Out, Standard PE Pulling End Only - (1.3" OD), xxx length in feet	BMDP12X77SSPxxx
Micro Data Center, Plenum, 72 Fiber, 50/125 µm (2000/500MHz) GIGALite-10 Multimode, Aqua Jacket, MTP Female with 3.0 mm Round, 39 in. Break-Out, MTP Female with 3.0 mm Round, 39 in. Break-Out, Standard PE Pulling End Only - (2" OD), xxx length in feet	BMDP72E77SSPxxx
Micro Data Center, Plenum, 12 Fiber, 50/125 µm (2000/500MHz) GIGALite-10 Multimode, Aqua Jacket, MTP Female with 3.0 mm Round, 39 in. Break-Out, MTP Female with 3.0 mm Round, 39 in. Break-Out, Standard PE Pulling End Only - (1.3" OD), xxx length in feet	BMDP12E77SSPxxx

NOTE: xxx=length in meters  
Please visit [www.berktek.com/teklab](http://www.berktek.com/teklab) for other cable, fiber and configuration options.

Premium Low-loss Pre-Terminated MTP To MTP Multimode Backbone Cables

STYLE	PART NO.
Micro Data Center, Plenum, 72 Fiber, Premium Low Loss (0.35 dB MTP connector pair loss), 50/125 µm (4900/500 MHz) GIGALite-10XBm, Multimode, Aqua Jacket, MTP Female with 3.0 mm Round, 39 in., Break-Out, MTP Female with 3.0 mm Round, 39 in. Break-Out, Standard PE Pulling End Only - (1.3" OD)	BMDP72XLLSSPxxx

NOTE: xxx=length in meters

Pre-Terminated Backbone/Trunk Interbuilding Cables

STYLE	PART NO.
Adventum, Plenum, 72 Fiber, 50/125 µm (4900/500 MHz) GIGALite-10XB Multimode, Aqua Jacket, MTP Female with 3.0 mm Round, 39 in. Break-Out, MTP Female with 3.0 mm Round, 39 in. Break-Out, Standard PE Pulling End Only - (2" OD)	BLTP72X77SSPxxx
Adventum, Plenum, 12 Fiber, 50/125 µm (4900/500 MHz) GIGALite-10XB Multimode, Aqua Jacket, MTP Female with 3.0 mm Round, 39 in. Break-Out, MTP Female with 3.0 mm Round, 39 in. Break-Out, Standard PE Pulling End Only - (1.3" OD)	BLTP12X77SSPxxx
Adventum, Plenum, 72 Fiber, 50/125 µm (2000/500 MHz) GIGALite-10 Multimode, Aqua Jacket, MTP Female with 3.0 mm Round, 39 in. Break-Out, MTP Female with 3.0 mm Round, 39 in. Break-Out, Standard PE Pulling End Only - (2" OD)	BLTP72E77SSPxxx
Adventum, Plenum, 12 Fiber, 50/125 µm (2000/500 MHz) GIGALite-10 Multimode, Aqua Jacket, MTP Female with 3.0 mm Round, 39 in. Break-Out, MTP Female with 3.0 mm Round, 39 in. Break-Out, Standard PE Pulling End Only - (1.3" OD)	BLTP12E77SSPxxx
Adventum, Plenum, 72 Fiber, 50/125µm (4900/500 MHz) GIGALite-10XB Multimode, Aqua Jacket, MTP Female with 3.0mm Round, 39 in. Break-Out, LC/PC with Duplex Clip with 2.0mm Furcation, 39 in. Break-Out, Standard PE Pulling End Only-(2" OD)	BLTP72X74SFPxxx
Adventum, Plenum, 72 Fiber, 50/125µm(2000/500MHz) GIGALite 10-Multimode, Aqua Jacket, MTP Female with 3.0mm Round, 39 in. Break-Out, LC/PC with Duplex Clip with 2.0mm Furcation, 39 in. Break-Out, Standard PE Pulling End Only-(2" OD)	BLTP72E74SFPxxx

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