

# NetClear®

## STRUCTURED CABLING

**Berk-Tek®**  
A NEXANS COMPANY

**legrand®**

Ortronics



## MM1 Fiber Optic Solutions

NetClear® MM1 fiber-optic solutions feature Berk-Tek GIGALite™ multimode fiber, guaranteed to support 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), horizontal, backbone,

and campus fiber optic structured cabling systems.

### 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, combined 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 MM1 SYSTEM PERFORMANCE

The NetClear MM1 fiber solution was developed for advanced network requirements. All NetClear MM1 solutions guarantee extended Gigabit Ethernet distances. NetClear MM1 offers DC/SAN, horizontal, backbone, and campus fiber solutions that guarantee performance and network longevity. The NetClear MM1 solution is supported by Berk-Tek GIGALite 50/125- $\mu$ m or 62.5/125 $\mu$ m optical fiber. Both options provide outstanding performance for legacy LED-based networks and industry-leading performance for high speed VCSEL-based systems like Gigabit Ethernet. NetClear recommends 50/125- $\mu$ m GIGALite for new construction and 62.5/125- $\mu$ m optical fiber for legacy networks.

### THE NETCLEAR MM1 PERFORMANCE GUARANTEE

**Exceptional Performance**  
NetClear MM1 solutions guarantee performance well beyond the IEEE and Fibre Channel distance limitations for standard multimode fiber optic cable.

### Compatible

Exceptional performance with both laser and LED-based systems.

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

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

**Application Migration**  
GIGALite 50/125- $\mu$ m fiber is laser optimized for 10 Gb/s networks up to 150 meters.

**Pre-Terminated Trunk Cable Assemblies and Modular Cassette**  
Deliver enhanced optical performance and fast deployment.

**Full Peace of Mind**  
NetClear MM1 ensures that transmission is free of bit errors induced by the structured cabling.

### Channel Components

#### Berk-Tek Cable

- 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.

MM1

**NetClear**<sup>®</sup>  
STRUCTURED CABLING

Delivering  
Reliability.

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

**NETCLEAR MM1 DISTANCE GUARANTEES**  
(in meters)

FIBER TYPE	GIGALITE 50/125				62.5/125			
	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	—	2000	2000
Gigabit Ethernet, 1 Gb/s	750	550	600	550	300	275	600	550
Fibre Channel, 2.125 Gb/s	390	300	—	—	220	150	—	—
10G Ethernet, 10 Gb/s	150	82	500	—	36	33	300	—

\*NetClear MM1 solution can deliver specified 1300 nm distances at 10 Gb/s over WWDW technology

**NETCLEAR MM1 ORDERING INFORMATION**

ORTRONICS<sup>®</sup> NETCLEAR MM1 COMPONENTS

**Momentum<sup>®</sup> 2 Cassettes (50/125µm 500/500 MHz-km) and 62.5/125µm 200/500 MHz-km)**

STYLE	HEIGHT	PART NO.
50 LC quad, 24 fiber, 2 MPO with pins	1U	OR-M2LCQ24-50E
50 SC duplex, 12 fiber, 1 MPO with pins	1U	OR-M2SCD12-50E
62.5 LC quad 24 fiber, 2 MPO with pins	1U	OR-M2LCQ24-62
62.5 SC duplex 12 fiber, 1 MPO with pins	1U	OR-M2SCD12-62

**Momentum 3 Cassettes 62.5/125µm 200/500 MHz-km)**

STYLE	HEIGHT	PART NO.
62.5 LC quad 24 fiber, 2 MPO with pins	1U	OR-M3LCQ24-62
62.5 LC duplex with shutters 24 fiber	1U	OR-M3LSD12-62
62.5 SC duplex 12 fiber, 1 MPO with pins	1U	OR-M3SCD12-62

**Fc Series Rack-Mount Patch Fiber Cabinets**

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, Black, Beige Adapters, Phosphor Bronze Sleeve**

STYLE	FIBER COUNT	PART NO.
SC, Duplex	12	OR-0FP-SCD12MB
LC, Duplex	12	OR-0FP-LCD12MB
LC, Quad	24	OR-0FP-LCQ24MB

**Fib-Or-Cop II Workstation Outlets**

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

**Patch Cords, Duplex, 1 Meter Length**

TYPE	CONNECTORS	PART NO.
62.5/125	SC to SC	OR-P1DA2BRFZFZxxxM
	LC to LC	OR-P1DA2BRGZGZxxxM
50/125	SC to SC	OR-P1DF2LRFZFZxxxM
	LC to LC	OR-P1DF2LRGZGZxxxm

NOTE: xxx=length in meters, 001, 002, 003 are the standard lengths

**OptiMo<sup>®</sup> Field-Installable Connectors**

DESCRIPTION	STYLE	FIBER	PART NO.
No Epoxy/No Polish Zirconia Ferrule (for tight buffered cable)	SC	62.5/125	OR-205KAS9FA-62
	SC	50/125	OR-205KAS9FA-50T
	LC	62.5/125	OR-205KAS9GA-62
	LC	50/125	OR-205KAS9GA-50T
	Field Installation Kit	Pre-polished	OR-854B00000-1
Anaerobic Termination, Zirconia Ferrule (ideal for Adventum <sup>™</sup> 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

BERK-TEK NETCLEAR MM1 COMPONENTS

**Pre-Terminated Backbone/Trunk Cables**

STYLE	PART NO.
Micro Data Center, Plenum, 72 Fiber, 50/125 µm (700/500MHz) GIGALite Multimode, Orange 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	BMDP72L77SSPxxx
Micro Data Center, Plenum, 12 Fiber, 50/125 µm (700/500MHz) GIGALite Multimode, Orange 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	BMDP12L77SSPxxx
Micro Data Center, Plenum, 72 Fiber, 62.5/125 µm (200/500MHz) Multimode, Orange 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	BMDP72C77SSPxxx

Please visit [www.berktek.com/teklab](http://www.berktek.com/teklab) for other options available.

**Fiber Optic Cables**

CABLE TYPE	FIBER TYPE	FIBERS	BANDWIDTH-OFL	PART NO.
Horizontal Interconnect (Tight Buffer) Plenum	50/125	2	700/500	ICP002LB3010/75
	62.5/125	4	200/500	ICP004CB3510/25
Premise Distribution (Tight Buffer) Riser	50/125	6	700/500	PDR006LB3010/75
	62.5/125	12	200/500	PDR012CB3510/25
Adventum Indoor/Outdoor (Loose Tube-dry) Riser	50/125	24	700/500	LTR0X024LB3010/75
	62.5/125	48	200/500	LTR12B048CB3510/25

Note 1: Contact Berk-Tek Customer Service at 1-800-BERK-TEK for complete listings of product offerings. Note 2: Visit [www.berktek.com](http://www.berktek.com) for all GIGALite optical fiber specifications.

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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