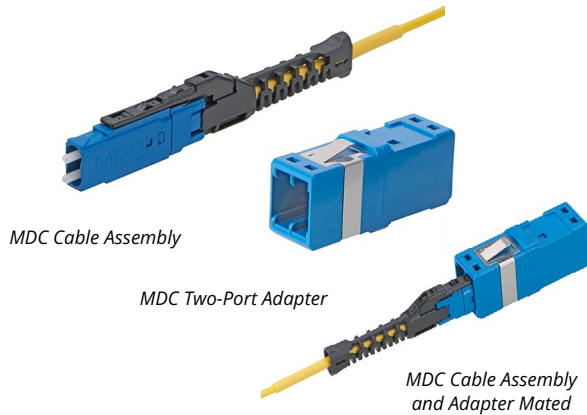


# MDC Adapters and Cable Assemblies >

MDC connectors, cable assemblies, patch panels and cassettes deliver optimized fiber density for high-performance applications, combining proven 1.25mm ferrule technology with revolutionary US Conec DirectConec™ push-pull boot technology to maximize space while ensuring reliable operation and simplifying installation and maintenance.

## ADVANTAGES AND FEATURES



|                        |  |
|------------------------|--|
| Fiber Types            | Single-mode, multi-mode                  |
| Standards              | GR-326, TIA-568, IEC Attenuation Grade B |
| Drop-in Replacement    | Duplex LC adapters                       |
| Adapter Ports          | 2, 3, 4                                  |
| Cable Outside Diameter | 1.60 to 2.00mm                           |
| Operating Temperatures | -18 to +70°C                             |

### Helps meet demand for increased bandwidth with greater fiber count in less space

The compact design offers approximately 50% space savings compared with traditional LC connectors.

### Simplifies mating and access to individual connectors

DirectConec push-pull boot technology makes mating/unmating easy.

### Reduces changeover requirements for upgrading patch panels

Available LC-to-MDC adapters plug directly into existing LC patch panel cutouts without the need for panel modifications.

### Improves reliability and supports problem-free changeovers

The MDC system employs ruggedized 2.00mm diameter cable and GR-326-rated connectors for dependable operation through multiple mate/unmate cycles.

### Offers multiple options for increased design flexibility

Options include electromagnetic interference (EMI)-shielded adapters, two- or four-port adapters and various cutout and line card configurations.

### Enables simple polarity reversal

The MDC connector boot uses an easily reversible design.

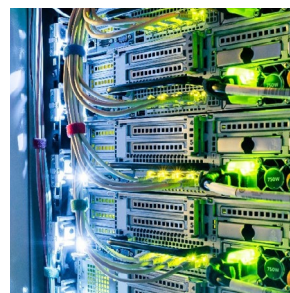
## MARKETS AND APPLICATIONS

### Servers and Storage

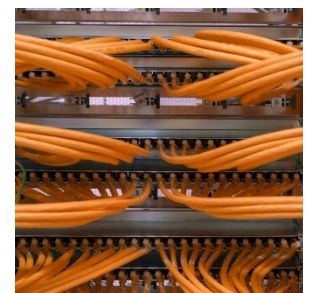
Cable distribution and management systems  
10G, 40G, 100G, 200G, 400G or 800G system migration installations  
Servers  
Transceiver applications

### Networking

Switches  
Routers  
Cloud computing systems



*Servers*



*Switches*

# MDC Adapters and Cable Assemblies >

## SPECIFICATIONS

### Reference Information

Packaging: Bag  
Standards:  
GR-326  
TIA-568  
IEC Attenuation Grade B  
Fiber Count: Duplex (two-fiber single jacket)  
Cable: Riser (OFNR)  
Jacket Ratings:  
Low-smoke zero halogen (LSZH)  
Plenum (OFNP)  
Fiber Types:  
Single Mode: OS2  
Multi-Mode: OM3, OM4  
Contact Face: Angled physical contact (APC)  
or ultra physical contact (UPC)  
Connector Types: Duplex LC, MPO/MTP, MDC  
Designed in: Millimeters  
RoHS: Yes  
Halogen Free: Yes

### Physical

Connector Housings:  
Single Mode: Green APC, blue UPC  
Multi-Mode: Aqua UPC  
Jacket Colors:  
Single Mode (OS2): Yellow  
Multi-Mode (OM3/OM4): Aqua  
Cable Outside Diameter: 1.60 to 2.00mm  
Split Sleeve Material: Zirconia ceramic  
Operating Temperatures: -18 to +70°C  
Storage Temperatures: -40 to +70°C

### Optical

Connector Insertion Loss (IL): 0.35 dB  
Connector Return Loss (RL): 55 dB (max.)

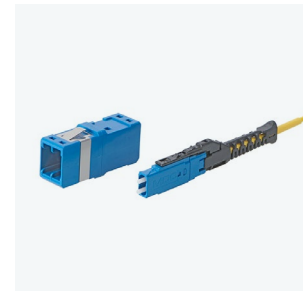
Two-port, three-port and four-port adapters connect MDC connectors to MDC connectors or MDC Jr. connectors. The two-port and three-port adapters are designed to fit through the same panel cutout defined for duplex LC adapters, allowing an instant doubling or tripling of the current module/panel connector density by simply removing the LC duplex adapters and installing the MDC adapters.



*MDC Two-Port Adapter  
Aligned Key – MDC/MDC*



*MDC Three-Port Adapter  
Aligned Key – MDC/MDC Jr.*



*MDC Two-Port Adapter  
and Connector*

[www.molex.com](http://www.molex.com)