

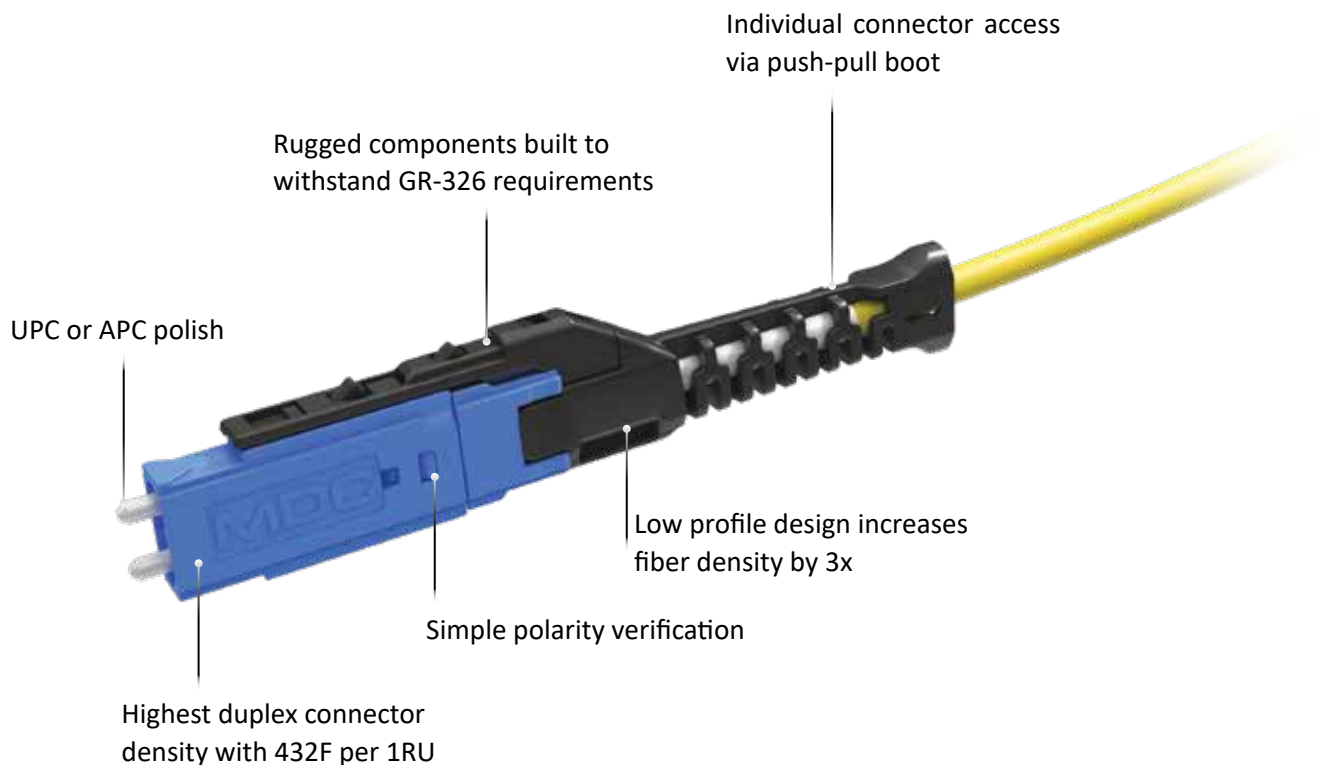


ELiMENT™ MDC Connector

US Conec's ELiMENT™ MDC connector is a Very Small Form Factor (VSFF) duplex optical connector designed for termination of Multi-mode and Single-mode fiber cables up to 2.0mm in diameter. The MDC connector is manufactured with proven 1.25mm ferrule technology used in industry standard LC optical connectors, meeting IEC 61753-1 Grade B insertion loss requirements.

Features:

- Two 1.25mm ferrules in one connector housing
- Push-pull boot for connector insertion and extraction
- Simple polarity reversal with no exposed fibers
- Meets IEC 61753-1 Grade B insertion loss requirements
- Telcordia GR-326 and TIA-568 compliant
- Designed for cables up to 2.0mm OD
- MM, SM and SM APC available
- 3x fiber cabling density over LC



New Applications Require a Reduced Format Connector

Multiple emerging transceiver Multi-Source Agreements (MSAs) have defined port breakout architectures that require a duplex optical connector with a smaller footprint than the LC connector. The reduced size of the MDC connector will allow a single array transceiver to accept multiple MDC patch cables which are individually accessible directly at the transceiver interface. The new format will support four individual MDC cables in a QSFP footprint and two individual MDC cables in an SFP footprint.

The increased connector density at the module/panel minimizes hardware size which leads to reduced capital and operational expense. A one Rack Unit (RU) housing can accommodate 144 fibers with LC Duplex connectors and adapters. Using the smaller MDC connector increases the fiber count to 432F in the same 1 RU space.

Carrier Grade Performance

Although the MDC connector is almost half the size of an LC connector with twice the number of ferrules, it's rugged housing, high-precision molding and engagement length allow it to exceed the same Telcordia GR-326 requirements as the LC connector, including the extremely demanding Proof and TWAL tests.

Maintaining Duplex Connector Accessibility

The MDC push-pull boot allows installation experts to easily insert and extract the MDC connector in tighter, more confined spaces without affecting neighboring connectors. The flexible boot allows for easy insertion and extraction of a single connector and will not buckle or bend.



Capacity Increased by 3x Using MDC Connectors and Adapters

Quick and Simple Polarity Reversal

The polarity reversal of the MDC connector is effortless and does not expose or twist delicate fibers during the process. To change polarity, pull the boot from the connector housing, rotate the boot 180 degrees, and re-assemble the boot assembly back onto the connector housing. Polarity marks on the top and side of the connector provide notification of reversed connector polarity.

Polarity Reversal Process:



Separate connector housing from boot



Rotate 180°

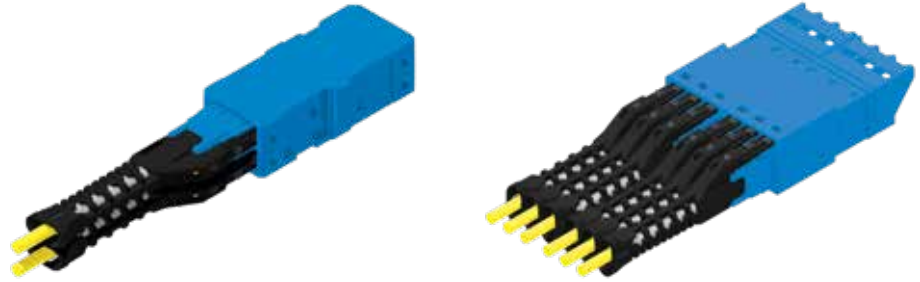


Re-attach boot to connector housing

Ever-Increasing MDC Ecosystem

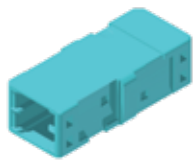
US Conec partners with industry leading vendors to develop components and equipment necessary to improve the installer and end-user experience with the following solutions:

- Multiple adapter variants
- Aggregation solutions
- Polishing equipment
- Test equipment
- Inspection scopes
- Interferometry



Backwards Compatible Adapters

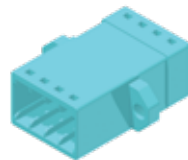
US Conec offers 2-port and 3-port adapters designed to fit through the same panel cutout defined for duplex LC adapters, allowing an instant 2x or 3x of the current module/panel connector density by simply removing the LC duplex adapters and installing the MDC adapters.



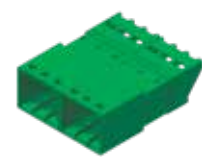
MDC 2-Port Adapter



MDC 3-Port Adapter



MDC 4-Port Adapter



MDC 6-Port Adapter

MDC Connector Cleaner

The new MDC cleaning tool uses the proven and reliable push technology pioneered by IBC™ brand cleaners to allow swift and efficient cleaning of MDC dual ferrules with one actuation. The MDC cleaning tool features dual precision cleaning nozzles for pre-installed connectors in a panel or module adapter and a tethered adapter for accessible connectors.



MDC Jr.

Optimized for breakouts and On Board Optic architectures, the MDC Jr. connector brings all the functionality and testability of a connector while minimizing valuable space consumption behind the panel.

