

VersaBeam EBO Interconnect Solutions

VersaBeam EBO (Expanded Beam Optical) Interconnect Solutions use lensed technology to deliver high-performance, low-maintenance, reliable and scalable fiber connectivity for tomorrow's data centers. Innovative expanded beam connector options integrate 12, 16 or 144 fibers into a single connector, helping simplify cable routing and offering high fiber density.

ADVANTAGES AND FEATURES

Simplifies cleaning and inspection

Using EBO technology improves reliability and reduces sensitivity to dust, reducing the need for cleaning by specially trained staff.

Speeds deployment and turn-up

The plug-and-play assembly makes assembly and maintenance easier, reducing downtime and lowering the total cost of ownership.

Delivers exceptional signal integrity for high-performance applications

Low connector IL and high RL numbers improve system operation.

Enables flexible, scalable designs

SM and MM fiber options available with a selection of compact, high-density form factors support scalable and upgradable architectures.

Fiber Types	Single-mode (SM), multi-mode (MM)
Connector Types	12F/16F Push-Pull, 144F High-Density
Fibers per Connector	12, 16, 144
Connector Insertion Loss (IL)	<0.7 dB (SM) <0.3 dB (MM)
Connector Return Loss (RL)	>55 dB (SM) >25 dB (MM)
Operating Temperatures	-10 to +60°C

Increases fiber density

Consolidating up to 144 fibers into a single connector reduces the number of connectors for high-bandwidth applications, streamlines design work and cable routing and simplifies maintenance.

Reduces mating/unmating forces to ease assembly operations

The ferrules are mated using fiber suspension, enabling low mating and unmating forces even for high fiber counts.

12- and 16-Fiber Push-Pull Connector

Speeds installation

The proven push-pull boot technology eases assembly and maintenance on high-density panels.

Streamlines upgrades

The footprint is compatible with select SC-footprint MPO adapters, making patch panel upgrades easier and more cost-effective.

Supports reliable mating

The familiar MPO-style connector latching mechanism helps ensure proper mating and reduces assembly errors.



12F and 16F Push-Pull Connector



144F High-Density Connector Assembly

144-Fiber High-Density Connector

Simplifies design and maintenance by reducing the number of connectors

The high-density design consolidates more fibers into fewer connectors, requiring nine times fewer connectors than MPO-16 interconnects.

Enables use in space-constrained applications

The receptacle is designed to minimize protrusion from the front panel.

Eases maintenance operations

The ergonomic design features a pull sleeve to quickly and easily remove the plug from the receptacle.

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MARKETS AND APPLICATIONS

Networking

AI cluster infrastructure
Data centers
Hubs
Patch panels
Structured cables
Switch-to-switch connections
Switching systems

Servers and storage

Intra-rack connections
Servers

Telecommunications

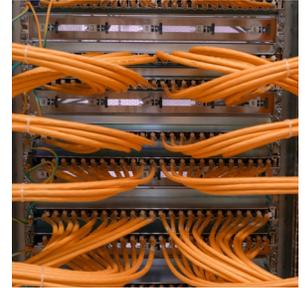
Computer cards
Optical electrical modules
Routers



Data Centers



Servers



Switching Systems

SPECIFICATIONS

Reference Information

Packaging: Individually bagged
Designed in: Millimeters
Standards: GR-1435
Connector Types: 12F/16F Push-Pull,
144F High-Density
Fiber Types:
SM—OS1, OS2
MM—OM3, OM4, OM5
RoHS: Yes
Halogen Free: Yes

Optical

Connector IL: <0.7 dB (SM), <0.3 dB (MM)
Connector RL: >55 dB (SM), >25 dB (MM)
Operating Wavelength: 1,310nm (SM),
850nm (MM)

Physical

Connector Housings: Green (SM), aqua (MM)
Mating Force (approx.): 0.7N per ferrule
Mating Ferrule Spring Load: 3N
Fibers per Connector: 12, 16, 144
Fiber Diameter (Core/Cladding): 9/125µm (SM),
50/125µm (MM)
Cable Outside Diameter: 3.00mm
Cable Lengths: 1.0 to 10.0m, longer cables
available as custom solutions
Operating Temperatures: -10 to +60°C

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