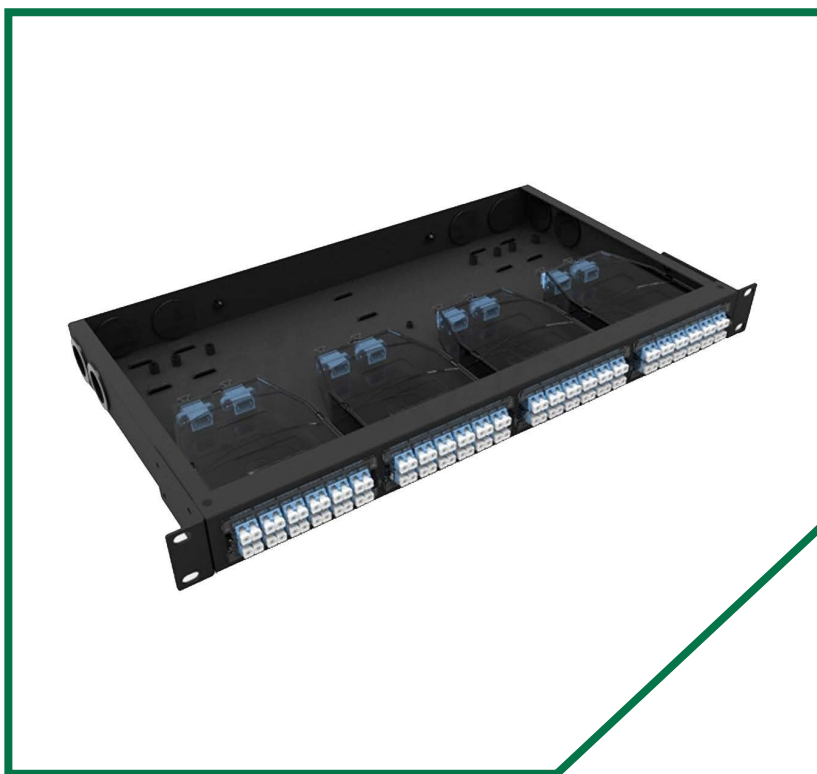


Part Number: PL-FOPMTP144

Product Description:

Premium 19-inch 1U modular fiber panel for pre-terminated MPO/MTP backbone systems in data centers and enterprise networks. Interchangeable cassettes and adapter modules support MPO/MTP-to-LC breakout, direct MPO/MTP pass-through and migration architectures. Typical cassette-loaded density is 72 to 144 fibers; higher counts are available with direct MPO/MTP adapter modules subject to the selected architecture.



Premium Features:

- 1U high-density 19-inch rack-mount chassis with up to 12 individually serviceable cassette/module positions, depending on module footprint.
- Standard 72F, 96F and 144F cassette-loaded configurations; higher-density MPO/MTP pass-through options available by project design.
- Front LC Duplex breakout or direct MPO/MTP interface; rear MPO/MTP trunk interface for rapid pre-terminated deployment.
- Supports MPO/MTP-8, -12, -16 and -24 formats as applicable, including Base-8, Base-12, Base-16 and Base-24 architectures.
- TIA polarity Methods A, B and C supported through the approved cassette/trunk configuration with clear polarity identification.
- Compatible with OS2, OM3, OM4 and OM5; bend-insensitive fiber components available for high-density routing.
- Premium low-loss MPO/MTP option with front-removable cassettes, strain relief, cable routing and protected bend management.
- Rear/side cable entry, tie-down points, grounding provision, dust protection and writable labeling fields simplify administration.

Applications: Data centers • SAN/LAN backbone • MDF/IDF rooms • Spine-leaf fabrics • Enterprise core • Telecom rooms • High-density cross-connect/interconnect • Parallel-optics migration

Technical Specifications:

Form Factor	19-inch rack mount, 1U, high-density modular cassette chassis
Module Capacity	Up to 12 cassette/adaptor positions, depending on selected module footprint
Fiber Capacity	72F / 96F / 144F typical with LC breakout; >144F possible with direct MPO/MTP pass-through modules
Typical 72F Configuration	6 × 12F MPO/MTP-to-LC cassettes = 72 fibers / 36 × LC Duplex
Typical 144F Configuration	12 × 12F cassettes or 6 × 24F cassettes = 144 fibers / 72 × LC Duplex
Front Interface	LC Duplex breakout or MPO/MTP pass-through; LC/UPC or LC/APC as selected
Rear Interface	MPO/MTP trunk interface; MPO/MTP-8 / -12 / -16 / -24 options by system architecture
Polarity & Keying	TIA Method A / B / C; key orientation and pinning per approved system design
Fiber Compatibility	OS2 (G.657.A1 / G.652.D), OM3, OM4 and OM5
Chassis Material	Cold-rolled steel, nominal ≥1.2 mm, precision formed
Finish	Black powder coating, RAL 9005 or equivalent
MPO/MTP Insertion Loss	Premium low-loss ≤0.35 dB max per mated pair, subject to qualified connector/BOM
MPO/MTP Return Loss	Single-mode APC ≥60 dB; multimode ≥20 dB, subject to qualified connector/BOM
LC Optical Performance	IL ≤0.25 dB max; SM UPC RL ≥50 dB; SM APC ≥60 dB; MM ≥20 dB
Connector Durability	≥500 mating cycles for qualified LC and MPO/MTP interfaces
Environmental Range	-10°C to +60°C operating; -20°C to +70°C storage; 5–95% RH, non-condensing
Fiber / Cable Management	Protected routing, bend control, strain relief, tie-down points and rear/side cable entry
Nominal Dimensions	19-inch × 1U (44.45 mm high); depth and module geometry per approved production drawing

Design & Ordering Details:

Modular Chassis Architecture • 12F cassette: 1 × MPO/MTP-12 rear to 6 × LC Duplex front. • 24F cassette: 1 × MPO/MTP-24 rear to 12 × LC Duplex front. • Direct MPO/MTP adapter modules available for trunk-to-trunk pass-through. • Mixed modules require one engineered polarity, keying, fiber-type and loss-budget plan.	Available Factory Configurations • PL-FOPMTP72: 72-fiber standard loaded or unloaded configuration. • PL-FOPMTP144: 144-fiber high-density loaded or unloaded configuration. • OS2/OM3/OM4/OM5; LC/UPC or LC/APC front interface as applicable. • Low-loss MPO/MTP, polarity-change and higher-density project modules subject to approved BOM.
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Standards & Design References: ANSI/TIA-568.3-E • ISO/IEC 11801-1 • EN 50173-1 • IEC 61754-7 (MPO) • IEC 61754-20 (LC) • TIA-604-5 (FOCIS-5) • IEC 61300 series • 19-inch rack dimensional practice

Compliance Options: RoHS / REACH documentation available subject to approved factory configuration and project requirement.