Amphenol

FUTURE-READY DATA CENTER SOLUTIONS



Data centers are the backbone of the digital world. As they evolve to meet growing demands of bandwidth, cloud computing, AI, and machine learning, seamless connectivity is critical.

Amphenol is a market leader with cutting-edge interconnect solutions—fiber optic, high-speed copper, and power technologies—delivering speed, scalability, and space efficiency from edge to hyperscale.

With decades of expertise, Amphenol provides fully integrated, cost-effective innovations that drive the next generation of cloud computing and networking.









Market Challenges









Amphenol's Solutions



Optical Connectivity Solutions

High-performance solutions including fiber distribution panels, advanced optical modules and distribution frames, power panels, and cable management



Cables

Diverse portfolio of fiber optic and copper cables engineered for high-speed data transmission, low latency, and durability



Accessories

Full suite of accessories to support seamless network deployment, including fiber optic adapters, MPO cassettes, and parking plugs



Outdoor Enclosure Solutions

A comprehensive range of durable outdoor enclosures designed to protect critical network infrastructure in the most demanding environments

COMPANY COLOR LEGEND:



Amphenol Charles Industries



Amphenol Custom



Amphenol Fiber Optic Products



Amphenol Network

Optical Connectivity Solutions



HyperX™: Optical Distribution Frame



- Cutting-edge solution tailored for efficient and scalable fiber optic cable management
- Built on a 19-inch seismic zone 4 rack, fiber density of up to 3,456 LC terminations
- Advanced cable management system, featuring 8-inch vertical cable managers and tie-off brackets



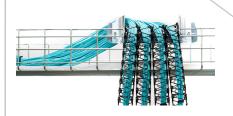
InfinX Splice®: Splice Systems



- · Reduces splicing time/complexity
- Efficient and safe platform to deploy high density fiber cables
- Splice drawers are built at logical fiber capacities, reducing ribbon segregation, and allowing for easy expansion
- Single frame can be configured to hold up to 20,736 fibers



FlexTrax® Cable Manager



- Offers flexibility and greater ease of access than any other product in market
- Safely guides fiber cables from wire basket or trough solutions to vital equipment, while securely protecting fiber from inadvertent bending or kinking
- Installation is simple and dynamic, allowing users to customize a solution to fit specific requirements



WaveTrax®: Fiber Raceway



- Protects and routes your fiber while maintaining proper fiber bend radius
- WaveTrax trough comes in standard six-foot lengths, and in 2", 4", 6",
 12" and 24" width



DC Power Panels with nrgSMART™



- Designed to power, protect, and monitor modern network servers and equipment
- Supports up to 600A, catering to diverse power requirements
- In panel nrgSMART™
 Technology delivers detailed essential voltage and current monitoring at the circuit level, providing critical information not available with traditional feed-level monitoring



Cascade Panel



- 1RU chassis with spaces for 4x custom patch plates at a total density of 96 LCs in a single rack unit
- Includes a sliding tray for easy access, and optimized cable management—perfect for data centers
- Available with VSFF connectors in both SN and MDC families



Fiber Management Panel: C2E







- Full range of high-performance, high-density fiber panels, modules, and accessories
- Fiber portfolio supports pre-terminated panels, Patch and Splice, Patch only, and AOM configurations
- Network flexibility, faster deployment, and cost reduction





Advanced Optical Modules



- High-Density Rack Mount Fiber Supports patching, splicing, MPO Breakout, Splitters, xWDM, and TAPs
- Variety of AOM widths available for different Base-8/Base-12 architectures
- AOMS are available for all fiber panel options





Overhead Summit Rack



- Designed for above-rack installation, where rack-space is limited
- Mountable on 20/24" Wire-Basket, or Dual-All Thread
- 19" EIA-U mounting, 3RU and 5RU options available
- Designed to work with FlexTrax for overhead-torack jumper transition



Cables

Trunk Cables



- Used for fixed cabling between network cabinets
- Preassembled with the appropriate connectors, application independent and system oriented
- Fiber cabling up to 288F and beyond
- Increased density provides significant reduction in installation and labor costs
- · Customized to fit your application



Patchcords



- Connects active devices and distribution technology in short distances
- Connects optical equipment, panels, and racks within the premise
- Available with different fiber and connectors types: LC, MPO, SC, and VSFF
- Available in a variety of cable designs and lengths
- Custom configurations available upon request















- · LED indicator at both ends of jumper
- · Flashlight style tool to apply power to one end of jumper to easily identify the far end of a jumper
- Eliminates errors due to mislabeling, missing labels or confusion in high density frames
- Lowers Opex costs by reducing installation, maintenance and trouble shooting time



CAT6 & CAT6A Cables



- 100% continuity tested
- · Compliant to industry standard ANSI/TIA-568
- · Integrated Snagless boots for ease of installation



Accessories



Fiber Adapters



- Stackable LC and MPO adapters aggregate a high number of connections in a small footprint
- Standard and Shuttered options- SC, LC, MPO, ST, FC
- EMI adapters in straight and angled configurations
- Protective dust caps keep adapter clean from dust



QSFP & OSFP Parking Plugs



- · Solution for organizing fiber trunking or jumpers before installing transceivers in active equipment
- Designed to park duplex LC or MPO jumpers in QSFP format, or two sets of mini-LC connectors or MPO in OSFP transceiver cages



Additional Custom Capabilities

AFCC delivers custom cable assemblies and network infrastructure services with fast response times and short lead times at a competitive price.

Indoor Multi-Fiber



Offers a versatile range from 2 to 144 fibers, with lengths spanning 5FT to 2000FT



Fiber Jumpers



Available in versatile Simplex and Duplex configurations, with extensive lengths from 1FT to 2000FT



Fiber Optic Jumper Cables ENTER PART # HERE FOR QUICK SEARCH **Amphenol** The Punchout Configuration Tool Multimode OM4 (50u)





EDGE COMPUTE

Walk-in Cabinet (WIC)



- Temporary / Permanent lighter weight alternative to concrete shelters
- Ability for remote site installation with limited maintenance
- Optimize Electric Utility cost by leveraging targeted rack cooling and pay-as-you-grow thermal system options
- 10" x 7", 10" X 10", 10" x 16", and 10" x 20" footprint, can be customized



Modular Cabinets - CUBE Modular Series



- Ultimate flexibility for outdoor deployments
- Multiple standard bays can be mixed and matched
- · Configuration of up to 4 bays
- Additional bays can be integrated on-site later
- Variety of power and thermal management options



CUBE Site Support and Battery Cabinets





- · Supports VRLA or Ni-Cd batteries
- Various rectifi er, power distribution and thermal options
- · Telcordia GR-487

Site Support Cabinet



Battery Cabinet



ENCLOSURES

Pad Mount Cabinets - CUBE PM Series



- · Available in 16-44 RU units
- Available with either 19" or 23" rails
- · Optional integrated power
- Multiple thermal management options available
 Options for remote monitoring
- options for remote monitoring
- · Compliant with GR-487-CORE



Wall / Pole Mount Cabinets





RL Cabinet



SC Cabina



- Available to up to 20 RU enclosures
 Provide superior environmental
- protection

 Multiple thermal management
- options available
 Meets NEMA 4X / NEMA 3R
- depending on RL series version
- SC series are GR-487-CORE compliant

RAPID INSTALLATION SOLUTIONS

TRUE HV

- · Omni-edge tier rated load capable
- · Superior strength and durability
- Roughly one-third the weight of Polymer Concrete
- Designed to meet or exceed ANSI/SCTE-77 Tier 15 ratings and Tier 22 ratings for various incidental traffic applications







- Economical alternatives for concrete pads
- Advanced composite material
- · Lightweight and easy to install

















Amphenol Network Solutions

With 40+ years of expertise, Amphenol Network Solutions delivers high-density fiber and power management solutions for cloud and colocation service providers. Engineered for seamless integration, we simplify installation, optimize space, and enhance network performance. We collaborate on tailored solutions to meet your deployment needs. Through aggressive technology development, we stay ahead of industry trends, continuously innovating to support the increasing demands of modern data centers with scalable, reliable infrastructure solutions





Amphenol Fiber Optic Products

Amphenol Fiber Optic Products provides expertise and solutions in fiber optic interconnect applications, with more than 40 years of experience. Servicing the wireless, IT/datacom, data center and medical markets, Amphenol Fiber Optic Products leads the industry in quality, service, innovation, and customer satisfaction through an unyielding desire to Connect People with Technology.











Amphenol Custom Cable, headquartered in Tampa, Florida, stands at the cutting edge of cable manufacturing and customization solutions. Renowned for our rapid service and exceptional engineering support, we cater to a wide range of industries requiring tailored cable configurations. Our innovative configurator tool empowers our customers to effortlessly design and order customized cables that meet their specific requirements, ensuring both quality and reliability. Amphenol Custom Cable continues to lead the industry, driving advancements that deliver tangible benefits to our clients.









Amphenol Charles Industries

Charles Industries, LLC is a diversified manufacturer and marketer of high-technology systems for telecommunications, wireless, broadband cable, utility, EV & edge compute markets. Charles supplies a comprehensive line of environmental enclosure solutions for fiber, copper, coax, and wireless backhaul applications. Founded in 1968, Charles has built a solid reputation of product innovation, outstanding customer service, and field-proven performance. Today, Charles' products service the networks of all major North American telecommunications carriers, both wireline and wireless.



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Pioneering Connectivity and Technology Solutions Worldwide

Pioneering Connectivity and Technology Solutions Worldwide, Amphenol stands at the forefront as one of the world's largest providers of high-technology interconnect, sensor, and antenna solutions. With a rich heritage of innovation and excellence, our products are at the heart of the electronics revolution, seamlessly integrating and empowering industries across the globe with capabilities encompassing broadband, enclosures, optics, cables, and antenna solutions.

Our Legacy and Global Reach

Founded in 1932, Amphenol has grown into a global leader, with 140,000 employees worldwide and a presence in over 40 countries across 6 continents. Our journey is marked by our commitment to excellence, pushing the boundaries of technology to connect and protect the world.

Diverse Market Expertise

We cater to a wide range of end markets:





















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