

MOLEX POWERCAT

Copper cabling solutions



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creating connections for life

A night cityscape with a digital particle overlay. The skyline features several illuminated skyscrapers, including the Marina Bay Sands in Singapore. The foreground is filled with a dense field of glowing blue and green particles, creating a sense of digital connectivity. The text 'CONNECTED ENTERPRISE SOLUTIONS' is overlaid on the left side of the image.

CONNECTED ENTERPRISE SOLUTIONS

Part of the Molex Group, **Molex Connected Enterprise Solutions** has delivered connectivity for organizations and campuses for over 40 years. We have design and manufacturing facilities around the world and trade directly into more than 100 countries.

We insist on high standards, both in product manufacture and in the quality of work provided by our global network of Molex Certified Installers. That's why we offer a 25-year System Performance and Application Assurance Warranty – providing you with confidence our systems will continue to deliver the technical excellence you demand for your business.

THE BENEFITS:

- Reliable high performance products built to be used and re-used
- Comprehensive range of copper and fiber, including products designed for specific applications
- Technical support teams around the world to support you throughout the life of the installation
- Versatile solutions designed to make upgrades and alterations straightforward
- Hand-selected, Molex-certified installers and consultants ensure quality of service end to end
- 25-year System Performance and Application Assurance Warranty
- Developing high quality business connectivity solutions for over 50 years

MORE INFORMATION

For downloadable datasheets with full specifications, use the product search at molexc.es.com.

Full product catalogs are available from your local sales team - find your contact here: molexc.es.com/contact-us/sales-team.

Please note not all products are available in all regions.

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| POWERCAT C6A



The latest applications for data and low-voltage power connectivity require high performance cabling. The Category 6 Augmented cable Standard, or Cat 6A, was created to further improve the performance of Cat 6 Ethernet cables. Using Cat 6A enables 10 Gigabit Ethernet data rates over a single cable run up to 328 feet at bandwidths up to 500MHz. Additional insulation reduces crosstalk, even in unshielded cables.

Installing Molex Cat 6A helps to future-proof a network against changes such as increasingly bandwidth-heavy applications, new technologies, or increased number of users or access points. For these reasons Cat 6A is required or recommended for new installations in healthcare and education facilities.

Cat 6A can handle higher levels of power in Power over Ethernet (PoE) installations without any degradation in performance. The thicker conductors of Cat 6A help dissipate heat, reducing loss.

Cat 6A is defined in ISO/IEC 11801 and TIA/EIA 568.

MOLEX POWERCAT 6A AT A GLANCE

- Designed to support high speed 10GBASE-T networks
- Backward compatible with 10/100/1000BASE-T networks.
- 10G Performance when installed as a complete Cat 6A Shielded System
- Ideal for IEEE 802.3bt Type 4 "4PPoE"/"PoE++" applications

- Full end-to-end range of cables, patch cords, patch panels and adapter plates, jacks and plugs, outlets and enclosures
- Shielded (S/FTP, U/FTP and F/UTP) and unshielded options
- 25-year system performance and application warranty available to qualifying installations (see website for full details)

View the full range at molexces.com/products/copper/cat6a

POE

Cat 6A offers enhanced performance for Power over Ethernet installations. For high-power PoE (type 3 / Class 5 / 60W or above) we recommend Cat 6A. See page 5 for more.

AV SOLUTIONS

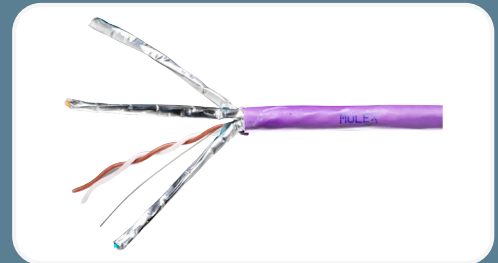
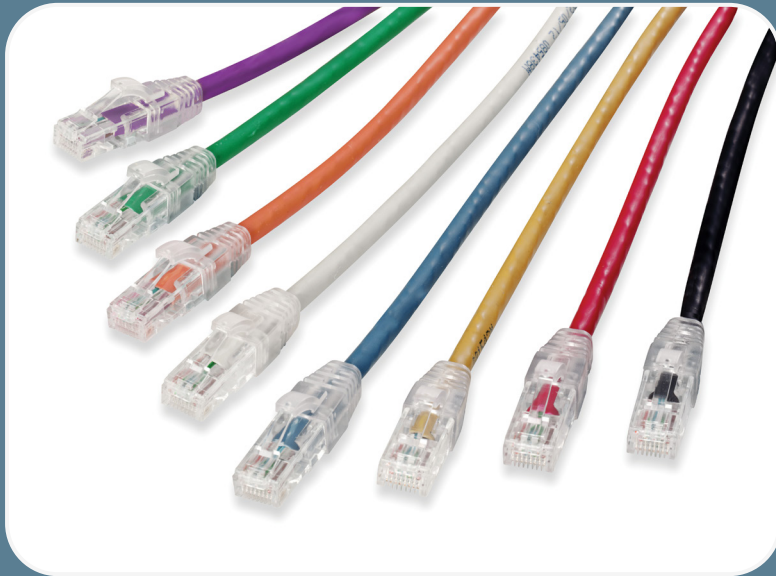
HD Base-T and SDVoE enable AV signals to be carried over twisted-pair cabling. Twisted-pair cabling can carry high resolution video, sound and images over greater distances. It is also lighter, cheaper, and easier to work with than dedicated AV cables.

For full 10G Base-T / UHD functionality, both HD Base-T and SDVoE require Cat 6A cabling.

See molexces.com/solutions-overview/audio-visual/ for more.



POWERCAT CABLES & PATCH CORDS

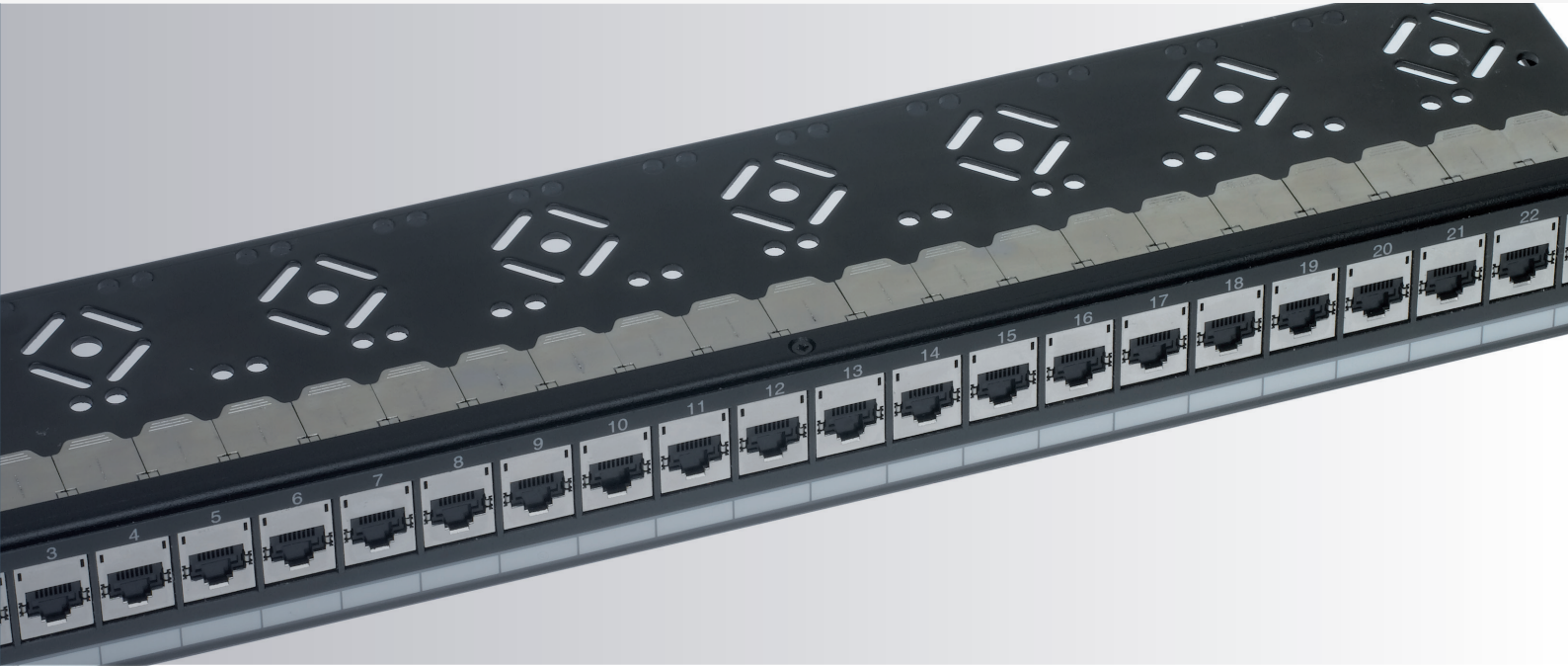


The Molex PowerCat range of twisted-pair cables and patch cords ranges from cost-effective Cat 5e to future-ready Cat 7A. With high performance and excellent reliability, these products are ideal for backbone and horizontal applications, telecoms rooms / data centers and PoE.

- High quality four pair stranded or solid copper wire construction
- Cat 5e / 6 / 6A / 7 and 7A products available
- Designed to meet or exceed the requirements of current international standards
- Independently tested and verified
- Patch cords are pre-terminated with RJ45 plugs and feature anti-snag slim strain relief slip on boots
- S/FTP, F/UTP, U/FTP and U/UTP variants
- Suitable for EIA 568A or 568B connectivity
- Available with LS0H or PVC sheath
- Slim 28 AWG option for high density areas, for example in TR rooms or data centers, offering 35% space saving over standard 26 AWG cable
- Solid 23 AWG option ideal for longer cable runs or PoE applications
- Pre-terminated assemblies for use in data centers and highspeed network environments - up to 80% faster to install than traditional field installation
- IP65, IP67 and Antimicrobial patch cords available

Find and download the product catalogue for your region at molex.com/resource-library/literature/

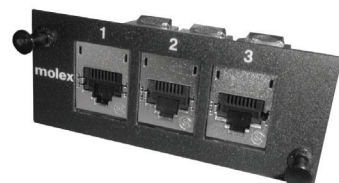
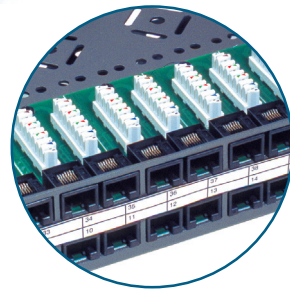
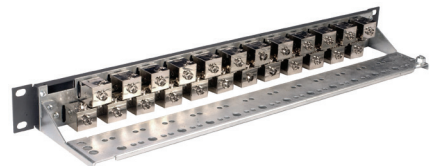
PATCH PANELS & ADAPTER PLATES



Designed with direct feedback from our global network of installers, consultants and distributors, our range of patch panels and adapter plates ensures we have the right solutions to suit every project.

- Unloaded and Loaded versions available - Unloaded for maximum installation flexibility, and pre-Loaded for speed and efficiency
- Can be configured to provide exactly the required number of ports
- DataGate (see next page) and Keystone options
- Angled and Straight options
- Standard 1U / 2U sizing designed to fit easily into industry standard cabinets
- Manufactured of high-quality, durable sheet metal for a long life and multiple use / reuse
- Integral cable management tray on select products provides cable strain relief and tidy dressing
- Individual ports can be color-coded for site-specific network administration
- Unloaded Adapter Plate designed for applications where fiber and copper are required in a single panel.

Find and download the product catalogue for your region at molex.com/resource-library/literature/



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JACKS, MODULES & OUTLETS



Molex provides an extensive range of copper outlets in shielded and unshielded applications. Molex's patented Synergy footprint provides the user with the flexibility to intermix platforms.

The innovative Molex DataGate jack design protects connections from dust and contaminants and ensures proper connection.

JACKS

- DataGate (see right) and Keystone Jacks
- Designed to maintain clean, secure connections
- Available in multiple colors
- Pointed IDC (Insulation Displacement Contact) towers speed termination and enhance cable retention
- Patented IDC V-shaped contacts that flex not fatigue when terminated for reliable long-life and reuse
- 568A/B wiring configuration
- Compatible patch panels available for both Keystone and DataGate
- Shielded Cat 6A DataGate Jack manufactured of robust die cast zinc alloy for 360° shielding

MODULES & OUTLETS

- A range of module designs to suit regional wall outlet preferences
- Modules supplied fully assembled with DataGate jacks
- Individual protected port labeling
- IP67-rated backbox protects connections in work areas subject to heat, dust and humidity

Find and download the product catalogue for your region at molex.com/resource-library/literature/

MOLEX DATAGATE

The Molex DataGate is the cornerstone of the PowerCat system. Its innovative design features a unique spring loaded shutter to protect it from dust and contaminants. In addition, the ingenious spring-loaded design provides tactile feedback of proper connection and ejects improperly seated patch cords, all with a simple single-handed plug-in and removal.

Molex DataGate jacks may accommodate both solid (AWG22 to AWG24) and stranded (AWG26) cables.

ZONE ENCLOSURES & CABLE MANAGEMENT



Proper cable management is an essential part of any installation. Molex's range of products enable easy management with minimal effort for long term manageability.

Zone cabling provides flexibility and scalability to network cabling designs. It is ideal for a range of environments, including high churn open offices, educational facilities, multi-tenant workspaces, PoE networks and smart building installations.

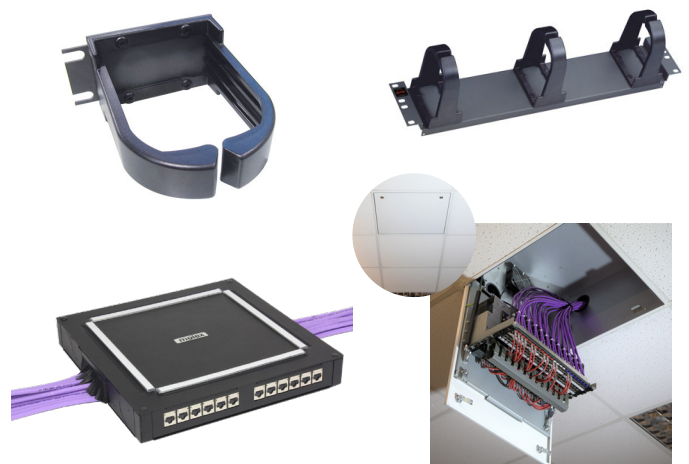
ZONE ENCLOSURES

- Optimizes space
- Provides floor-level MACs and enables easy location, management and maintenance of network
- Two options: in-ceiling and under-floor. Both fit within a standard 2x2' / 600x600mm suspended ceiling or raised floor grid space
- Cost-effective, robust and versatile
- Manage multiple copper ports, fiber splices, MTP/MPO fibers and active equipment in one enclosure
- In-ceiling version can be locked for additional security and can accommodate a fan for efficient cooling

CABLE MANAGEMENT

- Robust construction ensures durability even with repeated handling
- Available in 1U and 2U and different ring sizes for different densities
- Flexible rings for convenient operation
- Designed to manage high-volume, high-density patching

Find and download the product catalogue for your region at molex.com/resource-library/literature/



IP RATED & APPLICATION SPECIFIC PRODUCTS



The need for a Category 6A connectivity solution designed for areas outside the normal office environment is growing. Data transmission is now ubiquitous in laboratories, food processing plants, kitchens and healthcare environments where connections require additional protection.

IP RATED PRODUCTS

Protects vulnerable network connection from tough environmental conditions

IP67

Cat 6A shielded jack, backbox & patch cord designed for use in work areas subject to heat, fluid, dust and humidity

IP66

Cat 6A shielded patch cord and enclosure designed to protect connections in outdoor environments such as outdoor wireless access points and security cameras

IP65

Medical grade, Cat 6A shielded patch cord, jack and wallplate with an easy-to-clean design to assist in control of microbes

ANTIMICROBIAL PRODUCTS

Molex Medical Grade products have been created by incorporating an antibacterial agent (biocide) that can assist in suppressing the growth of bacteria on the surfaces of products when conditions exist where growth can occur.

Modular wallplate footprint allows for Cat 6, Cat 6A and optical fiber fitout

Cat 6A shielded patch cord

Find your regional sales contact at:
molexces.com/contact-us/sales-team.



POWER OVER ETHERNET



PoE has revolutionized the way modern networking infrastructures operate. A convenient and cost-effective approach to delivering both power and data connectivity over a single connection, PoE is also the ideal infrastructure for smart building / IoT installations.

Reliable: PoE comes from a central and universally compatible source, rather than a collection of distributed wall adapters. It can be backed-up through uninterruptible power supply, or controlled to easily disable or reset devices.

Safe: The PoE standard incorporates measures to ensure its safe operation, both to protect legacy equipment from damage and to protect users from the hazards of electrical power.

Cost effective: Reduce the time and expense of having electrical power cabling installed.

MOLEX POE SOLUTIONS

From Cat 5e, for lower power PoE, to Cat 6A, to PoH and UPoE, Molex provides a full range of patch cords, cables, jacks, patch panels and more.

Find and download the product catalogue for your region at molexces.com/resource-library/literature/

SMART BUILDING SOLUTIONS

Molex CoreSync is a smart building platform built on PoE. For more information visit

www.molexces.com/coresync



Dependable Solutions for Demanding Environments

Overcome your connectivity challenges today and capture future opportunity with our flexible, high-performance networking solutions and deep market expertise.

Find your local contact at

molexces.com/contact-us.

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