



## PowerCat™ 6A Solution

### What we do

For over 30 years Molex has manufactured comprehensive copper and optical fibre data transport solutions for the transmission of voice, data and imaging signals

### Peace of mind

The PowerCat 6 system is covered by a Global 25 Year Product, System Performance and Application Assurance Warranty

### Standards Compliance

TIA/EIA -568-C.2 Cat 6A Channel and PL  
ISO/IEC 11801 AMD 1 Class EA



## PowerCat™ 6A Solution

In today's bandwidth hungry climate with rapidly-emerging technology trends, never before has the need for a high speed networking solutions been more critical. Designed to support 10 Gigabit Ethernet (10GBase -T), Category 6A is an optimum speed structured cabling solution offering superior performance where speed, reliability, future proofing or long term tenancy is required, and as such, is now becoming the system of choice for Data Centres, financial institutions and enterprises requiring the maximum performance level for their business operations.

Traditionally unshielded cabling solutions have been the system of choice in many markets. However, due to the 10-fold increase in data transmission requirements to support 10GBase-T applications, the implementation of a Category 6A cabling system is significantly more complex than its predecessors and brings with it a number of issues relating to cabling layout and design, containment and alien crosstalk. The only effective way to counter these issues whilst still maintaining high-speed data transfer is via a shielded Category 6A solution.

Molex's PowerCat™ 6A solution has been developed with the highest performing capabilities in mind. With improved data transmission over higher frequencies and enhanced noise suppression - why compromise? Our solution has been meticulously designed to provide the most advanced alien crosstalk mitigation and an insertion loss that surpasses all unshielded systems.



### The Technology

By adopting a Category 6A shielded solution, the traditional implementation challenges faced when using unshielded are significantly reduced - alien crosstalk, cost of pathways and spaces, and the building infrastructure design. Shielded solutions bring about exceptional reliability at extreme speeds with greater bandwidth and headroom. Termination time of shielded products, once considered cumbersome, is now dramatically reduced mainly due to smaller cable diameter, improved cable management, tooling and connector technology.

### Molex's Category 6A Solution

To provide a superior performing network solution, we have developed our shielded product range. The Molex Category 6A shielded solution is designed specifically for high speed data transmissions demanding little room for error, whilst offering exceptional alien crosstalk suppression, excellent insertion loss and protection against Electromagnetic Interference (EMI).

### DataGate™ Connector

The PowerCat 6A Shielded RJ45 connector is the cornerstone of the PowerCat 6A System offering superior alien crosstalk mitigation and insertion loss. The spring-loaded shutter means that it not only protects from dust and contaminants, but also ejects improperly seated or damaged patch cords. The connector is available in either traditional rear or side entry variations.

### Patch Panels

Robust 24 and 48 port panels supplied with equally robust cable management trays for cable strain relief and uniform cable dressing. The angled panel design provides enhanced port access and minimises patch cord bend radius whilst eliminating the need for horizontal rack managers, thus allowing higher port density in racks - ideal for Data Centre applications.

### U/FTP Cable

Specifically designed to support 10 Gigabit Ethernet (10GBase-T), this high performance cable minimises alien crosstalk and provides excellent signal isolation whilst eliminating the effects of EMI.

### Patch Cords

Made from high quality shielded four pair 26AWG stranded wire and available in a range of colours and lengths, the PowerCat 6A shielded patch cords are pre-terminated with RJ45 shielded plugs and feature over-moulded anti-snap strain relief boots.

### Highlights of the Molex PowerCat™ 6A Solution

- 360° shielded connection with the shielded DataGate connector available in both traditional rear or side entry variations.
- Protection - the unique spring loaded DataGate connector shutter not only protects against dust, contaminants and unwanted ingress, but also ejects improperly seated or damaged patch cords
- Traditional or side entry modules available - enabling easy fit in limited backbox space
- Reliability - cable management features help reduce stress on cables and maintain consistent performance
- Excellent performance - end-to-end shielded solution for the support of 10Gb Ethernet (10GBASE-T) application

