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.

Horizontal Shielded 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 EML

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-snag 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

PowerCat[™] > 6A Solution

molex

What we do

For over 30 years Molex has manufactured innovative data transport and advanced management solutions.

Bringing Advanced Physical Layer Lifecycle Management to Enterprises Worldwide

Peace of mind

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

Standards Compliance

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



PowerCat[™] 6A Solution



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Ordering Information

Cable		
	Order No.	Description
	CAA-0322L-VL	PowerCat 6A U/FTP LS0H Cable 500M Violet

Patch Panels

Patch Panels		
Description		
PowerCat 6A Shielded 1U 24 Port Patch Panel		
PowerCat 6A Shielded Angled 1U 24 Port Patch Panel		
PowerCat 6A Shielded 2U 48 Port Patch Panel		
PowerCat 6A Shielded Angled 2U 48 Port Patch Panel		
PowerCat 24 Port DataGate Patch Panel, Unloaded UTP or Shielded - 1U		
PowerCat 24 Port DataGate Angled Patch Panel, Unloaded UTP or Shielded - 1U		
PowerCat 48 Port DataGate Patch Panel, Unloaded UTP or Shielded - 2U		
PowerCat 48 Port DataGate Angled Patch Panel, Unloaded UTP or Shielded - 2U		

Patch Cords and Cable Assemblies

Order No.	Description
PCD-07000-**	PowerCat 6A Shielded Patch Cord 1m
PCD-07001-**	PowerCat 6A Shielded Patch Cord 2m
PCD-07002-**	PowerCat 6A Shielded Patch Cord 3m
PCD-07003-**	PowerCat 6A Shielded Patch Cord 5m
PCD-07004-**	PowerCat 6A Shielded Patch Cord 7m
PCD-07005-**	PowerCat 6A Shielded Patch Cord 10m
PCD-07054-VL	PowerCat 6A Shielded Solid Cable Assembly, LS0H, Violet - 4m
PCD-07055-VL	PowerCat 6A Shielded Solid Cable Assembly, LS0H, Violet - 6m
PCD-07056-VL	PowerCat 6A Shielded Solid Cable Assembly, LS0H, Violet - 8m
PCD-07057-VL	PowerCat 6A Shielded Solid Cable Assembly, LS0H, Violet - 10m
PCD-07058-VL	PowerCat 6A Shielded Solid Cable Assembly, LS0H, Violet - 20m
PCD-07059-VL	PowerCat 6A Shielded Solid Cable Assembly, LS0H, Violet - 30m
PCD-07060-VL	PowerCat 6A Shielded Solid Cable Assembly, LS0H, Violet - 40m
	Note: Insert colour code instead of ** in part number when ordering patch cords:

0C=Red, 0E=Grey, 0H=Blue, 0J=Green, 0K=Yellow, 0W=White, 0P=Purple, 0N=Orange, BK=Black

Work Area Modules and Jacks

Description
PowerCat 6A Jack RJ45 568A/B Shielded
PowerCat 6A Tool-less Keystone Jack, RJ45, 568A/B, Shielded
PowerCat 6A Angled Mod-Snap III DG Module, Shielded - White
PowerCat 6A Angled Contura DG Module, Shielded - White
PowerCat 6A Angled Euromod II DG Module, Shielded - White
PowerCat 6A 22.5 x 45mm Legrand compatible DG Module, Shielded - White
PowerCat 6A 45 x 45mm Legrand compatible DG Module, shielded - White
PowerCat 6A Bticino Compatible DG Module, Shielded - Black
PowerCat 6A 1 Port DIN DG Module, Shielded - White
PowerCat 6A 2 Port DIN DG Module, Shielded - White
PowerCat 6A 1 Port DIN DG Module, Shielded - Almond
PowerCat 6A 2 Port DIN DG Module, Shielded - Almond
PowerCat 6A Mod-Snap III Side Entry DG Module, Shielded -White
PowerCat 6A Euromod II Side Entry DG Module, Shielded - White
PowerCat 6A 45 x 45mm Legrand Side Entry DG Module, Shielded - White
PowerCat 6A 22.5 x 45mm Legrand Side Entry DG Module, Shielded - White
PowerCat 6A 1 Port Din Side Entry DG Module, Shielded - White
PowerCat 6A 1 Port Din Side Entry DG Module, Shielded - Almond
PowerCat 6A 2 Port Din Side Entry DG Module, Shielded - White
PowerCat 6A 2 Port Din Side Entry DG Module, Shielded - Almond

Note: Insert colour code instead of ** in part number when ordering Modules and Jacks - 02=White, 04=Black

Consolidation Points

Order No.	Description
CPT-00053	PowerCat 6A 8 Port Consolidation Point Enclosure, Shielded
SBX-00009-02	PowerCat 6A 1 Port Synergy Surface Box RJ45 568A/B Shielded - White (loaded)
SSY-00014-02	PowerCat 6A 2 Port Synergy Surface Box, Unloaded - White
SSY-00015-02	PowerCat 6A 4 Port Synergy Surface Box, Unloaded - White
SSY-00016-02	PowerCat 6A 6 Port Synergy Surface Box, Unloaded - White