

PowerCat 6 STP DataGate Plus™

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**PREMISE
NETWORKS**
A Division of Molex



November 2004

PowerCat 6 STP DataGate Plus™

Introducing Molex Premise Networks new PowerCat 6 STP System.

Shielded cabling systems have traditionally been employed to take advantage of their intrinsically improved EMC performance. In Europe regulations governing emissions from and immunity to the effects of EMI (electromagnetic interference) are set down in the Electromagnetic Compatibility (EMC) Directive 92/31/EEC. EMI or radio frequency interference (RFI) is any unwanted signal which adversely affects the operation of a device or system. A properly installed shielded cabling system offers enhanced immunity and lower emissions than an equivalent UTP system.

Additionally STP cabling systems offer benefits in terms of Alien Crosstalk performance, which is important in the delivery of high-speed (>1Gb) network protocols. Alien Crosstalk is the unwanted coupling of a signal travelling on a pair in one cable into the adjacent cable. Alien Crosstalk is similar to NEXT except that the disturbing pair is in a different cable than the disturbed pairs and it affects all cables when bundled during installation. Shielded Twisted Pair cabling installations are therefore one method of reducing Alien Crosstalk.

The PowerCat 6 STP System features the new STP DataGate Plus™ Category 6 connector. This superior connector provides 360° shielded protection by utilising a two piece tin/nickel plated brass can that encloses the RJ45 connector. The STP DataGate Plus™ connector allows 180° and 90° cable exit and features a unique integral shutter.

Suitable for high-speed data transmission, the STP DataGate Plus™ C6 connector has been designed to exceed the highest electrical performance standards in the industry and has been independently tested and verified by Intertek ETL SEMKO for Category 6 component compliance. The STP DataGate Plus™ connector is also backwards compatible with STP/FTP C5E systems.

New product range will be available from January 1st, 2005.

If you have any questions regarding this product range please contact me +48 22 32 60 720 or mbujak@molex.com.

Your sincerely

Marcin Bujak
Product Manager



Euromod 1xRJ45, M1 Straight, 568A/B, STP, PowerCat 6, White

FEATURES SUMMARY

The Euromod modular system provides a flexible and versatile method of installation, allowing the user the choice of installing as many data outlets as required. The modules are fully assembled units featuring the Molex Premise Networks shuttered STP DataGate Plus Connector in a 25 x 50 mm fascia. The Euromod module features the STP DataGate Plus Category 6 connector that allows 180° and 90° cable exit. This superior connector provides 360° shielded protection by utilising a two piece tin/nickel plated brass can that encloses the RJ45 IDC. The STP DataGate Plus connector includes a unique integral shutter that not only protects it from dust and contaminants, but the ingenious spring-loaded design also ejects improperly seated patch cords. The STP DataGate Plus connector is dual colour coded for either 568A or 568B wiring schedules and is RJ11 compatible. Individual ports maybe colour coded for site-specific network administration, by fitting connector icon labels. Suitable for high-speed data transmission, the STP DataGate Plus Category 6 connector has been designed to exceed the highest electrical performance standards in the industry and has been independently tested and verified by ETL SEMKO for Category 6 component compliance. The STP DataGate Plus connector is also backwards compatible with STP/FTP C5E systems.

- 360° Shielded Shuttered RJ45 DataGate Plus
- Module component compliant
- Independently tested
- 25 x 50mm Fascia

Standards compliance: TIA/EIA-568-B.2-1, FCC Subpart F 68.5, ISO 60603-7, ISO 11801:2002, EN 50173:2002.

MECHANICAL PARAMETERS

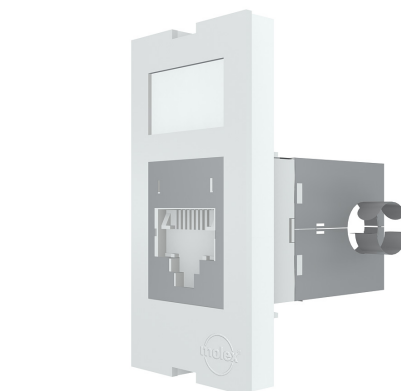
Dimensions [mm]: 25x50x37.5
Weight [mm]: 32.5

JACK:
Plastic Housing: UL94V0
Operating life: > 750 insertion cycles
Contact Material: Copper alloy
Contact plating: 1.25 µm gold on 2.50 µm nickel
Contact force: > 100 g
Plug retention force: > 15 kg
Can: 0.25 brass to C2680R pre-plated tin over nickel

IDC CONNECTOR:
Plastic Housing: UL94V0
Operating life: > 200 reterminations
Contact Material: Copper alloy
Contact plating: Sn 60%/Pb 40% alloy
Wire Accommodation: 24-22 AWG

TRANSMISSION PARAMETERS:

Insertion Loss _[1-250MHz]	≤ 0.2/√f	dB
NEXT _[1-250MHz]	≥ 54-20log(f/100)	dB
FEXT _[1-250MHz]	≥ 43.1-20log(f/100)	dB
RL _[1≤f<50MHz]	≥ 30	dB
RL _[50≤f<250MHz]	≥ 24-20log(f/100)	dB
LCL _[1-250MHz]	≥ 28-20log(f/100)	dB



ELECTRICAL PARAMETERS:

Interface Resistance:	< 20 mΩ
Resistance Margin:	< 2.5 mΩ
Insulation Resistance:	> 100 MΩ



Part number	Name
17C-X805	Euromod 1xRJ45, M1 Straight, 568A/B, STP, PowerCat 6, White
CSP-00021-**	Blank 6-Pak Icons DataGate+ (Bag of 10)
CSP-00022-**	Data 6-Pak Icons DataGate+(Bag of 10)
CSP-00023-**	Voice 6-Pak Icons DataGate+(Bag of 10)

Labelling colour option: 01 - almond, 02 - white, 04 - black, 05 - ivory, 08 - grey, BL - blue, GR - green, PP - purple, RD - red, RG - orange, YL - yellow

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Euromod 1xRJ45, M1 Angled, 568A/B, STP, PowerCat 6, White

FEATURES SUMMARY

The Euromod modular system provides a flexible and versatile method of installation, allowing the user the choice of installing as many data outlets as required. The modules are fully assembled units featuring the Molex Premise Networks shuttered STP DataGate Plus Connector in a 25 x 50mm fascia.

The Euromod module features the STP DataGate Plus Category 6 connector that allows 180° and 90° cable exit. This superior connector provides 360° shielded protection by utilising a two piece tin/nickel plated brass can that encloses the RJ45 IDC.

The STP DataGate Plus connector includes a unique integral shutter that not only protects it from dust and contaminants, but the ingenious spring-loaded design also ejects improperly seated patch cords.

The STP DataGate Plus connector is dual colour coded for either 568A or 568B wiring schedules and is RJ11 compatible. Individual ports maybe colour coded for site-specific network administration, by fitting connector icon labels.

Suitable for high-speed data transmission, the STP DataGate Plus Category 6 connector has been designed to exceed the highest electrical performance standards in the industry and has been independently tested and verified by ETL SEMKO for Category 6 component compliance. The STP DataGate Plus connector is also backwards compatible with STP/FTP C5E systems.

- 360° Shielded Shuttered RJ45 DataGate Plus
- Module component compliant
- Independently tested
- 25 x 50mm Fascia

Standards compliance: TIA/EIA-568-B.2-1, FCC Subpart F 68.5, ISO 60603-7, ISO 11801:2002, EN 50173:2002.

MECHANICAL PARAMETERS

Dimensions [mm]: 25x50x37.5
Weight [mm]: 32.5

JACK:
Plastic Housing: UL94V0
Operating life: > 750 insertion cycles
Contact Material: Copper alloy
Contact plating: 1.25 µm gold on 2.50 µm nickel
Contact force: > 100 g
Plug retention force: > 15 kg
Can: 0.25 brass to C2680R pre-plated tin over nickel

IDC CONNECTOR:
Plastic Housing: UL94V0
Operating life: > 200 reterminations
Contact Material: Copper alloy
Contact plating: Sn 60%/Pb 40% alloy
Wire Accommodation: 24-22 AWG

TRANSMISSION PARAMETERS:

Insertion Loss _[1-250MHz]	≤ 0.2/√f	dB
NEXT _[1-250MHz]	≥ 54-20log(f/100)	dB
FEXT _[1-250MHz]	≥ 43.1-20log(f/100)	dB
RL _[1≤f<50MHz]	≥ 30	dB
RL _[50≤f<250MHz]	≥ 24-20log(f/100)	dB
LCL _[1-250MHz]	≥ 28-20log(f/100)	dB



ELECTRICAL PARAMETERS:

Interface Resistance:	< 20 mΩ
Resistance Margin:	< 2.5 mΩ
Insulation Resistance:	> 100 MΩ



Part number	Name
17C-X806	Euromod 1xRJ45, M1 Angled, 568A/B, STP, PowerCat 6, White
CSP-00021-**	Blank 6-Pak Icons DataGate+ (Bag of 10)
CSP-00022-**	Data 6-Pak Icons DataGate+(Bag of 10)
CSP-00023-**	Voice 6-Pak Icons DataGate+(Bag of 10)

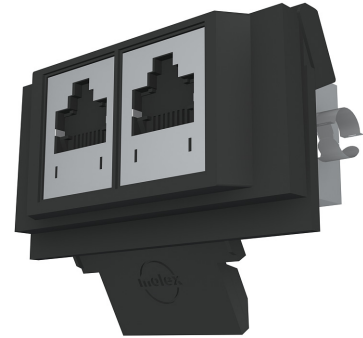
Labelling colour option: 01 - almond, 02 - white, 04 - black, 05 - ivory, 08 - grey, BL - blue, GR - green, PP - purple, RD - red, RG - orange, YL - yellow

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Tango Module 1xRJ45, STP PowerCat 6, Black

Tango Module 2xRJ45 STP PowerCat 6, Black



FEATURES SUMMARY

Molex Premise Networks Tango modules was designed to be compatible with original ABB Tango wallplates. The Product family consists of Single and Double port shuttered modules with unique stuffer caps. The Tango module features the STP DataGate Plus Category 6 connector that allows 180° and 90° cable exit. This superior connector provides 360° shielded protection by utilising a two piece tin/nickel plated brass can that encloses the RJ45 IDC. The STP DataGate Plus connector includes a unique integral shutter that not only protects it from dust and contaminants, but the ingenious spring-loaded design also ejects improperly seated patch cords. The STP DataGate Plus connector is dual colour coded for either 568A or 568B wiring schedules and is RJ11 compatible. Individual ports maybe colour coded for site-specific network administration, by fitting connector icon labels. Suitable for high-speed data transmission, the STP DataGate Plus Category 6 connector has been designed to exceed the highest electrical performance standards in the industry and has been independently tested and verified by ETL SEMKO for Category 6 component compliance. The STP DataGate Plus connector is also backwards compatible with STP/FTP C5E systems.

- 360° Shielded Shuttered RJ45 DataGate Plus
- Module component compliant
- Independently tested
- Compatible with ABB Tango wallplates

Standards compliance: TIA/EIA-568-B.2-1, FCC Subpart F 68.5, ISO 60603-7, ISO 11801:2002, EN 50173:2002.

MECHANICAL PARAMETERS

Dimensions [mm]: 59x47x37.5
Colour: Black

JACK:
Plastic Housing: UL94V0
Operating life: > 750 insertion cycles
Contact Material: Copper alloy
Contact plating: 1.25 µm gold on 2.50 µm nickel
Contact force: > 100 g
Plug retention force: > 15 kg
Can: 0.25 brass to C2680R pre-plated tin over nickel

IDC CONNECTOR:
Plastic Housing: UL94V0
Operating life: > 200 reterminations
Contact Material: Copper alloy
Contact plating: Sn 60%/Pb 40% alloy
Wire Accommodation: 24-22 AWG

TRANSMISSION PARAMETERS:

Insertion Loss _[1-250MHz]	≤ 0.2/√f	dB
NEXT _[1-250MHz]	≥ 54-20log(f/100)	dB
FEXT _[1-250MHz]	≥ 43.1-20log(f/100)	dB
RL _[1≤f<50MHz]	≥ 30	dB
RL _[50≤f<250MHz]	≥ 24-20log(f/100)	dB
LCL _[1-250MHz]	≥ 28-20log(f/100)	dB

ELECTRICAL PARAMETERS:

Interface Resistance:	< 20 mΩ
Resistance Margin:	< 2.5 mΩ
Insulation Resistance:	> 100 MΩ

Part number	Name
MCZ-00005-04	Tango Module 1xRJ45 STP PowerCat 6, Black
MCZ-00006-04	Tango Module 2xRJ45 STP PowerCat 6, Black
CSP-00021-**	Blank 6-Pak Icons DataGate+ (Bag of 10)
CSP-00022-**	Data 6-Pak Icons DataGate+(Bag of 10)
CSP-00023-**	Voice 6-Pak Icons DataGate+(Bag of 10)

Labelling colour option: 01 - almond, 02 - white, 04 - black, 05 - ivory, 08 - grey, BL - blue, GR - green, PP - purple, RD - red, RG - orange, YL - yellow

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**STP DIN 49075
Angled Module,
Shuttered, 1xRJ45,
568A/B PowerCat 6**

**STP DIN 49075
Angled Module,
Shuttered, 2xRJ45,
568A/B PowerCat 6**



ELECTRICAL PARAMETERS:

Interface Resistance:	< 20 mΩ
Resistance Margin:	< 2.5 mΩ
Insulation Resistance:	> 100 MΩ

FEATURES SUMMARY

The PowerCat 6 STP DIN module is designed for compatibility with the 50 x 50mm DIN 49075 standard. The product is a fully assembled unit featuring the shuttered STP DataGate Plus™ connector. The angled design reduces patch cord bend radius and features a protected labelling facility. Individual ports may be colour coded using a connector icon label, for site-specific network administration. The PowerCat 6 STP DIN module is available as a single or double port product and is supplied with a grid-plate. The module features the STP DataGate Plus Category 6 connector that allows 180° cable exit. This superior connector provides 360° shielded protection by utilising a two piece tin/nickel plated brass can that encloses the RJ45 IDC. The STP DataGate Plus connector includes a unique integral shutter that not only protects it from dust and contaminants, but the ingenious spring-loaded design also ejects improperly seated patch cords. The STP DataGate Plus connector is dual colour coded for either 568A or 568B wiring schedules and is RJ11 compatible. Suitable for high-speed data transmission, the STP DataGate Plus Category 6 connector has been designed to exceed the highest electrical performance standards in the industry and has been independently tested and verified by ETL SEMKO for Category 6 component compliance. The STP DataGate Plus connector is also backward compatible with STP/FTP C5E systems.

- DIN 49075 compatible
 - 360° Shielded Shuttered RJ45 DataGate Plus connector component compliant
 - Protected labelling facility
 - Angled fascia
 - 1 and 2 Port versions
- Standards compliance: TIA/EIA-568-B.2-1, FCC Subpart F 68.5, ISO 60603-7, ISO 11801:2002, EN 50173:2002.

MECHANICAL PARAMETERS

Dimensions [mm]:	50x50x37.5
JACK:	
Plastic Housing:	UL94V0
Operating life:	> 750 insertion cycles
Contact Material:	Copper alloy
Contact plating:	1.25 μm gold on 2.50 μm nickel
Contact force:	> 100 g
Plug retention force:	> 15 kg
Can:	0.25 brass to C2680R pre-plated tin over nickel
IDC CONNECTOR:	
Plastic Housing:	UL94V0
Operating life:	> 200 reterminations
Contact Material:	Copper alloy
Contact plating:	Sn 60%/Pb 40% alloy
Wire Accommodation:	24-22 AWG

TRANSMISSION PARAMETERS:

Insertion Loss _[1-250MHz]	≤ 0.2/√f	dB
NEXT _[1-250MHz]	≥ 54-20log(f/100)	dB
FEXT _[1-250MHz]	≥ 43.1-20log(f/100)	dB
RL _[1≤f<50MHz]	≥ 30	dB
RL _[50≤f<250MHz]	≥ 24-20log(f/100)	dB
LCL _[1-250MHz]	≥ 28-20log(f/100)	dB



Part number	Name
WNC-00036-02	STP DIN 49075 Angled Module, Shuttered, 1xRJ45, 568A/B PowerCat 6, White
WNC-00036-06	STP DIN 49075 Angled Module, Shuttered, 1xRJ45, 568A/B PowerCat 6, Almond
WNC-00037-02	STP DIN 49075 Angled Module, Shuttered, 2xRJ45, 568A/B PowerCat 6, White)
WNC-00037-06	STP DIN 49075 Angled Module, Shuttered, 2xRJ45, 568A/B PowerCat 6, Almond
CSP-00021-**	Blank 6-Pak Icons DataGate+ (Bag of 10)
CSP-00022-**	Data 6-Pak Icons DataGate+(Bag of 10)
CSP-00023-**	Voice 6-Pak Icons DataGate+(Bag of 10)

Labelling colour option: 01 - almond, 02 - white, 04 - black, 05 - ivory, 08 - grey, BL - blue, GR - green, PP - purple, RD - red, RG - orange, YL - yellow

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**STP Mod Mosaic
22.5x45mm,
Angled Module,
Shuttered, 1xRJ45,
568A/B PowerCat 6,
White**

FEATURES SUMMARY

The PowerCat 6 STP 22.5 x 45mm module is compatible with the Legrand range of 45 x 45mm bezels. Two modules or a single module and a blank may be installed in this format. The product is a fully assembled unit featuring the STP shuttered DataGate Plus™ connector. The angled design reduces patch cord bend radius and features a protected labelling feature. Individual ports may be colour coded using a connector icon, for site-specific network administration.

The 22.5 x 45mm module features the STP DataGate Plus Category 6 connector that allows 180° and 90° cable exit. This superior connector provides 360° shielded protection by utilising a two piece tin/nickel plated brass can that encloses the RJ45 IDC. The STP DataGate Plus connector includes a unique integral shutter that not only protects it from dust and contaminants, but the ingenious spring-loaded design also ejects improperly seated patch cords. The STP DataGate Plus connector is dual colour coded for either 568A or 568B wiring schedules and is RJ11 compatible.

Suitable for high-speed data transmission, the STP DataGate Plus Category 6 connector has been designed to exceed the highest electrical performance standards in the industry and has been independently tested and verified by ETL SEMKO for Category 6 component compliance. The STP DataGate Plus connector is also backwards compatible with STP FTP C5E systems.

- Legrand® 45 x 45mm bezel compatible
- 360° shielded shuttered RJ45 DataGate Plus connector component compliant
- Protected labelling facility
- Angled fascia

Standards compliance: TIA/EIA-568-B.2-1, FCC Subpart F 68.5, ISO 60603-7, ISO 11801:2002, EN 50173:2002.

MECHANICAL PARAMETERS

Dimensions [mm]: 22.5x45x37.5
 Weight [g]: 32.5
 JACK:
 Plastic Housing: UL94V0
 Operating life: > 750 insertion cycles
 Contact Material: Copper alloy
 Contact plating: 1.25 µm gold on 2.50 µm nickel
 Contact force: > 100 g
 Plug retention force: > 15 kg
 Can: 0.25 brass to C2680R pre-plated tin over nickel

IDC CONNECTOR:
 Plastic Housing: UL94V0
 Operating life: > 200 reterminations
 Contact Material: Copper alloy
 Contact plating: Sn 60%/Pb 40% alloy
 Wire Accommodation: 24-22 AWG

TRANSMISSION PARAMETERS:

Insertion Loss_[1-250MHz] ≤ 0.2/√f dB
 NEXT_[1-250MHz] ≥ 54-20log(f/100) dB
 FEXT_[1-250MHz] ≥ 43.1-20log(f/100) dB
 RL_[1≤f<50MHz] ≥ 30 dB
 RL_[50≤f<250MHz] ≥ 24-20log(f/100) dB
 LCL_[1-250MHz] ≥ 28-20log(f/100) dB



ELECTRICAL PARAMETERS:

Interface Resistance: < 20 mΩ
 Resistance Margin: < 2.5 mΩ
 Insulation Resistance: > 100 MΩ

Part number	Name
MLG-00022-02	STP Mod Mosaic 22.5x45mm Angled Module, Shuttered, 1xRJ45, 568A/B PowerCat 6, White
CSP-00021-**	Blank 6-Pak Icons DataGate+ (Bag of 10)
CSP-00022-**	Data 6-Pak Icons DataGate+(Bag of 10)
CSP-00023-**	Voice 6-Pak Icons DataGate+(Bag of 10)

Labelling colour option: 01 - almond, 02 - white, 04 - black, 05 - ivory, 08 - grey, BL - blue, GR - green, PP - purple, RD - red, RG - orange, YL - yellow

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Patch Cord RJ45, 568A/B, FTP (PiMF), PowerCat 6, PVC

FEATURES SUMMARY

Molex Premise Networks PowerCat 6 FTP (PiMF) patch cords are manufactured using high quality shielded four pair Category 6 stranded cable. Available in a range of colours and lengths, PowerCat 6 FTP (PiMF) patch cords are pre-terminated with RJ45 shielded plugs and feature cable strain relief boots with a plug latch protection cap.

Suitable for high speed data transmission, PowerCat 6 FTP (PiMF) patch cords have been designed to exceed the highest electrical performance standards in the industry and have been independently tested and verified by ETL SEMKO for Category 6 component compliance.

- Shielded FTP (PiMF) 4 pair stranded cable
- Pre-terminated with WE8W shielded plugs
- Strain relief boots
- Independently tested

Standards compliance: TIA/EIA-568-B.2-1, FCC Part 68 (plug dimensions and tolerances), ISO 60603-7, ISO 11801:2002, EN 50173:2002.

ELECTRICAL PARAMETERS:

Maximum voltage: 125 V
 Maximum current: 1.5 A
 DC Resistance: 15 mΩ/100 m
 Insulation Resistance: > 500 MΩ
 Characteristic impedance: 100 Ω±3 Ω

MECHANICAL PARAMETERS

Conductor size [AWG]: 26 (0.40 mm)
 Cable size [mm]: 6 mm
 Cable insulation: PVC
 Plug housing: UL94V-2 thermoplastic
 Plug contacts: 0.35mm phosphor bronze
 Plug contact plating: Gold plating on nickel underplate
 Operating temperature: max 75°C
 Weight:
 Element: Weight [g]
 PCD-00304-0* 60
 PCD-00305-0* 119
 PCD-00307-0* 230
 PCD-00309-0* 360
 PCD-00312-0* 480



Part number	Name
PCD-00304-0*	Patch cord RJ45, 568A/B, FTP (PiMF), stranded, PowerCat 6, PVC 0.5m
PCD-00305-0*	Patch cord RJ45, 568A/B, FTP (PiMF), stranded, PowerCat 6, PVC 1.0m
PCD-00307-0*	Patch cord RJ45, 568A/B, FTP (PiMF), stranded, PowerCat 6, PVC 2.0m
PCD-00309-0*	Patch cord RJ45, 568A/B, FTP (PiMF), stranded, PowerCat 6, PVC 3.0m
PCD-00312-0*	Patch cord RJ45, 568A/B, FTP (PiMF), stranded, PowerCat 6, PVC 5.0m

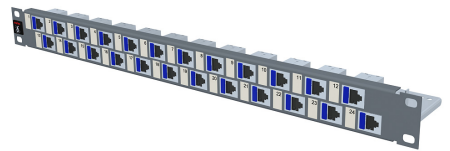
Patch cord colour option: C - red, E - grey, H - blue

MOLEX PREMISE NETWORKS:

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Rack 19" Patch Panel, 24xRJ45, 568A/B, STP, PowerCat 6, 1U, Graphite



FEATURES SUMMARY

Molex Premise Networks Category 6 STP Patch Panel is part of the PowerCat 6 STP product range that has been designed to support a growing requirement for shielded cabling systems offering enhanced EMC protection and improved Alien Crosstalk performance.

The PowerCat 6 STP Patch Panel features the STP DataGate Plus™ Category 6 connector. This superior connector provides 360° shielded protection by utilising a two piece fin/nickel plated brass can that encloses the RJ45 IDC. The STP DataGate Plus connector includes a unique integral shutter that not only protects it from dust and contaminants, but the ingenious spring-loaded design also ejects improperly seated patch cords. The STP DataGate Plus connector is dual colour coded for either 568A or 568B wiring schedules and is RJ11 compatible.

The 24 Port (1U) PowerCat 6 STP Patch Panel is supplied with a rear cable management tray for cable strain relief and neat cable dressing. Port numbering is provided on the front and rear of the panel and individual ports may be colour coded using connector icon labels for site-specific network administration.

Suitable for high-speed data transmission, the STP DataGate Plus Category 6 connector has been designed to exceed the highest electrical performance standards in the industry and has been independently tested and verified by ETL SEMKO for Category 6 component compliance. The STP DataGate Plus connector is also backwards compatible with STP/FTP C5E systems.

- 24 Ports 1U
 - Rear cable management included
 - Colour coded port option
 - 360° shielded shuttered DataGate Plus component compliant connector
 - 568A/B wiring schedule
 - Independently tested
- Standards compliance: TIA/EIA-568-B.2-1, FCC Subpart F 68.5, ISO 60603-7, ISO 11801:2002, EN 50173:2002.

MECHANICAL PARAMETERS

Dimensions [mm]: 483x44x103
 Weight [g]: 1340
 Material: Cold rolled 1.5 mm
 Finish: Graphite powdercoat
 JACK:
 Plastic Housing: UL94V0
 Operating life: > 750 insertion cycles
 Contact Material: Copper alloy
 Contact plating: 1.25 µm gold on 2.50 µm nickel
 Contact force: > 100 g
 Plug retention force: > 15 kg
 Can: 0.25 brass to C2680R pre-plated tin over nickel

IDC CONNECTOR:

Plastic Housing: UL94V0
 Operating life: > 200 reterminations
 Contact Material: Copper alloy
 Contact plating: Sn 60%/Pb 40% alloy
 Wire Accommodation: 24-22 AWG

TRANSMISSION PARAMETERS:

Insertion Loss_[1-250MHz] ≤ 0.2/√f dB
 NEXT_[1-250MHz] ≥ 54-20log(f/100) dB
 FEXT_[1-250MHz] ≥ 43.1-20log(f/100) dB
 RL_[1≤f<50MHz] ≥ 30 dB
 RL_[50≤f<250MHz] ≥ 24-20log(f/100) dB
 LCL_[1-250MHz] ≥ 28-20log(f/100) dB

ELECTRICAL PARAMETERS:

Interface Resistance: < 20 mΩ
 Resistance Margin: < 2.5 mΩ
 Insulation Resistance: > 100 MΩ



Part number	Name
PID-00182	Rack 19" Patch Panel, 24xRJ45, 568A/B, STP, PowerCat 6, 1U, Graphite
CSP-00021-**	Blank 6-Pak Icons DataGate+ (Bag of 10)
CSP-00022-**	Data 6-Pak Icons DataGate+ (Bag of 10)
CSP-00023-**	Voice 6-Pak Icons DataGate+ (Bag of 10)

Labelling colour option: 01 - almond, 02 - white, 04 - black, 05 - ivory, 08 - grey, BL - blue, GR - green, PP - purple, RD - red, RG - orange, YL - yellow

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FTP PowerCat 6 PVC
4 Pair Cable, 500m

FEATURES SUMMARY

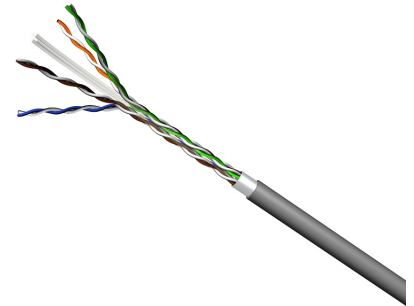
Category 6 compliant, one-side laminated foil shielded cable. 4 UTP pairs with a separator for the reduction of NEXT and ELFEXT. Designed for horizontal and vertical cabling in high speed data transmission networks. Small outside diameter, high flexibility.

ELECTRIC PARAMETERS:

Resistance [Ω /km]: 88
Nominal propagation is printed on cable sheath.

MECHANICAL PARAMETERS:

Conductor size [mm]: 23 AWG (0.57mm)
Insulated conductor diameter [mm]: ≤ 1.0
Single pair shield: none
Pair number: 4
Cable shield: one-side laminated aluminium foil
Outside cable diameter [mm]: 7.0
Temperature range [$^{\circ}$ C]
during installation: 0° C to $+50^{\circ}$ C
during operation: -20° C to $+60^{\circ}$ C
Acceptable bending radius
during installation: 8 x cable diameter;
during operation: 4 x cable diameter.
Sheath: FR-PVC (IEC 332.1)
Sheath colour: grey



Colour coding

Pair 1: white-blue/blue
Pair 2: white-orange/orange
Pair 3: white-green/green
Pair 4: white-brown/brown
Shipping weight [kg]: 24.5

TRANSMISSION PARAMETERS:

Insertion Loss _[1-250MHz]	$\leq 1.808 \sqrt{f} + 0.017f + 0.2/\sqrt{f}$	dB/100m
NEXT _[1-250MHz]	$\geq 44.3 - 15 \log(f/100)$	dB
PSNEXT _[1-250MHz]	$\geq 42.3 - 15 \log(f/100)$	dB
ELFEXT _[1-250MHz]	$\geq 27.8 - 20 \log(f/100)$	dB
PSELFEXT _[1-250MHz]	$\geq 24.8 - 20 \log(f)$	dB
RL _[1 \leq f < 10MHz]	$\geq 20 + 5 \log(f)$	dB
RL _[10 \leq f < 20MHz]	≥ 25	dB
RL _[20 \leq f < 250MHz]	$\geq 25 - 7 \log(f/20)$	dB
Delay _[1-250MHz]	$\leq 534 + 36/\sqrt{f}$	ns/100m
Delay Skew _[1-250MHz]	≤ 45	ns/100m
LCL _[1-250MHz]	$\geq 30 - 10 \log(f/100)$	dB

*- parameters for a 100m length



Part number	Name
CAA-00161	FTP PowerCat 6 PVC 4 Pair Cable, 500m

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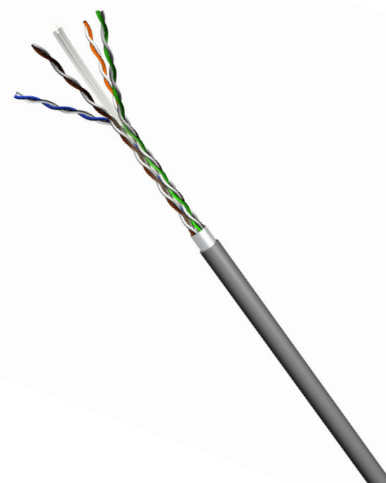
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FTP PowerCat 6 LSZH 4 Pair Cable, 500 m



FEATURES SUMMARY

Category 6 compliant, one-side laminated foil shielded cable. 4 UTP pairs with a separator for the reduction of NEXT and ELFEXT. Designed for horizontal and vertical cabling in high speed data transmission networks. Small outside diameter, high flexibility. Zero halogen (LSZH) sheath.

ELECTRIC PARAMETERS:

Resistance [W/km]: 75
Nominal propagation is printed on cable sheath.

MECHANICAL PARAMETERS

Conductor size [mm]: 23 AWG (0.57mm)
Insulated conductor diameter [mm]: ≤ 1.0
Single pair shield: none
Pair number: 4
Cable shield: one-side laminated aluminium foil
Outside cable diameter [mm]: 7.2
Temperature range [°C]
during installation: 0°C to +50°C
during operation: -20°C to +60°C
Acceptable bending radius during installation: 8 x cable diameter
during operation: 4 x cable diameter.
Sheath: LSZH (IEC 332.3C)
Sheath colour: grey

Colour coding

Pair 1: white-blue/blue
Pair 2: white-orange/orange
Pair 3: white-green/green
Pair 4: white-brown/brown
Shipping weight [kg]: 31

TRANSMISSION PARAMETERS:

Insertion Loss _[1-250MHz]	$\leq 1.808 \sqrt{f} + 0.017f + 0.2 / \sqrt{f}$	dB/100m
NEXT _[1-250MHz]	$\geq 44.3 - 15 \log(f/100)$	dB
PSNEXT _[1-250MHz]	$\geq 42.3 - 15 \log(f/100)$	dB
ELFEXT _[1-250MHz]	$\geq 27.8 - 20 \log(f/100)$	dB
PSELFEXT _[1-250MHz]	$\geq 24.8 - 20 \log(f)$	dB
RL _[1≤f<10MHz]	$\geq 20 + 5 \log(f)$	dB
RL _[10≤f<20MHz]	≥ 25	dB
RL _[20≤f<250MHz]	$\geq 25 - 7 \log(f/20)$	dB
Delay _[1-250MHz]	$\leq 534 + 36 / \sqrt{f}$	ns/100m
Delay Skew _[1-250MHz]	≤ 45	ns/100m
LCL _[1-250MHz]	$\geq 30 - 10 \log(f/100)$	dB

*- parameters for a 100m length



Part number	Name
CAA-00252	FTP PowerCat 6 LSZH 4 Pair Cable, 500m

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