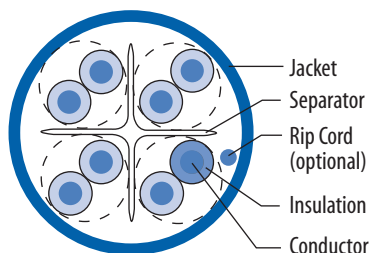


# Clipsal Professional Category 6+ (CP6+)

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# Cat 6+ Cable



The Clipsal Professional Series Category 6+ (CP6+) Cable is a superior product delivering the best network performance when used in conjunction with other Clipsal Professional Series Category 6+ products.

The Cable is constructed of 4 pairs with solid and insulated copper conductors, and is UL CM fire rated. It is designed for use in horizontal cabling and comes in a 305m (1000ft) easy pull out box.

As an integral part of the CP6+ series, this product has a lifetime warranty and system performance guarantee when installed by a Certified Clipsal Systems Installer/Integrator.

### PRODUCT FEATURES

- Meets the latest proposed Category 6 ANSI/TIA/EIA-568-B.2 draft Standard.
- Available in Grey and Blue sheath colours.
- 305m (1000ft) Pull Out box.
- Suitable for horizontal cabling.
- UL CM Fire rated.
- PE insulation, colour coded for 4 pairs.
- PVC insulation for outer jacket.

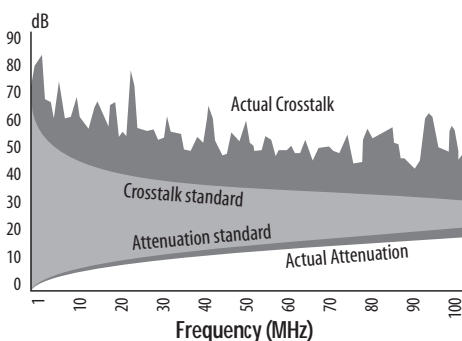
### CUSTOMER BENEFITS

- Meets the latest proposed Category 6 ANSI/TIA/EIA-568-B.2 draft Standard. This provides customers with the satisfaction of having a compliant product once Category 6 ratification is made.
- The easy pull out box allows for faster installations and ensures the prevention of any possible system degradation - both cost savers to the customer.
- Comes with the Clipsal Lifetime Warranty - a unique feature to the market! Offering the customer peace of mind for today and into the foreseeable future.

### MECHANICAL CHARACTERISTICS

Cable	
Gauge	24 AWG copper wire
Pair Count	4 pair individually colour coded
Rated temperature	60 °C, 75 °C.

Electrical	
Conductor Dimension (mm)	0.57
No. of Pairs	4
Core Dimension (mm)	0.98
Nom O. D. (mm)	5.5



### DIMENSIONS

Shipping Box	420mm(H) x 430mm(W) x 270mm(D)
Shipping Weight	15 Kg

### TECHNICAL SPECIFICATIONS

	Product Specification	Proposed Category 6	
<b>Attenuation (-dB)</b>	@1MHz	2.0	2.0
	@16MHz	7.6	7.6
	@31.25MHz	10.7	10.7
	@62.5MHz	15.4	15.4
	@100MHz	19.8	19.8
	@200MHz	29.0	29.0
<b>Crosstalk (-dB)</b>	@250Mhz	32.8	32.8
	@1MHz	74.3	74.3
	@16MHz	56.2	56.2
	@31.25MHz	51.9	51.9
	@62.5MHz	47.4	47.4
	@100MHz	44.3	44.3
<b>PSNEXT (-dB)</b>	@200Mhz	39.8	39.8
	@250Mhz	38.3	38.3
	@1MHz	72.3	72.3
	@16MHz	54.2	54.2
	@31.25MHz	49.9	49.9
	@62.5MHz	45.4	45.4
<b>ELFEXT (-dB)</b>	@100MHz	42.3	42.3
	@200Mhz	37.8	37.8
	@250Mhz	36.3	36.3
	@1MHz	67.8	67.8
	@16MHz	43.7	43.7
	@31.25MHz	37.9	37.9
<b>PSELFEXT (-dB)</b>	@62.5MHz	31.9	31.9
	@100MHz	27.8	27.8
	@200Mhz	21.8	21.8
	@250Mhz	19.8	19.8
	@1MHz	64.8	64.8
	@16MHz	40.7	40.7
<b>Return Loss (-dB)</b>	@31.25MHz	34.9	34.9
	@62.5MHz	28.9	28.9
	@100MHz	24.8	24.8
	@200MHz	18.8	18.8
	@250MHz	16.8	16.8
	@1MHz	19.0	19.0
	@16MHz	18.0	18.0
	@31.25MHz	16.5	16.5
	@62.5MHz	14.0	14.0
	@100MHz	12.0	12.0
	@200MHz	9.0	9.0
	@250MHz	8.0	8.0

### CATALOGUE NO. DESCRIPTION

<b>CPCAB6305 (XX)</b>	305m box
<b>(XX) for colour: (GY) grey, (BU) blue</b>	
(Not available in Australia)	

# Cat 6+ Patch Cord



The Clipsal Professional Series Category 6+ (CP6+) Patch Cord is a superior product delivering the best network performance when used in conjunction with other Clipsal Professional Series Category 6+ products.

The Patch Cord is constructed of high grade CP6+ (23 AWG) cable and quality RJ45 plugs and is designed to operate up to 300MHz. This enables it to operate successfully in a Category 6 environment.

Patch cords are available in white and blue with matching boots to help with circuit identification in the Cabinet/Rack.

As an integral part of the CP6+ series, this product has a lifetime warranty and system performance guarantee when installed by a Certified Clipsal Systems Installer/Integrator.

## PRODUCT FEATURES

- Performs beyond the proposed Category 6 standards ANSI/TIA/EIA-568-B.2 draft Standard.
- UL CMR Fire rated jacketing.
- PE insulation on conductors.
- PVC outer jacket material.
- Available in White and Blue now; other colors available in Q2 2002.
- Available in multiple lengths.
- Backward compatible with Category 5 and 5E products.

## CUSTOMER BENEFITS

- Performs beyond the latest proposed Category 6 ANSI/TIA/EIA-568-B.2 draft Standard. This provides customers with the satisfaction of having a compliant product once Category 6 ratification is made.
- Comes in White and Blue now for easier circuit identification and administration.
- Comes in various lengths to assist in better cable management.
- Is backward compatible with Category 5 and 5E products, allowing component mixing without degrading the network below the minimum component category.
- Comes with the Clipsal Lifetime Warranty - a unique feature to the market! Offering the customer peace of mind for today and into the foreseeable future.

## DIMENSIONS

Shipping Weight	Length	Weight
	1.0 meter	7g/pack of one
	1.5 meter	11g/pack of one
	2.0 meter	14g/pack of one
	3.0 meter	20g/pack of one

## TECHNICAL SPECIFICATIONS

Parameter	Value (-dB)	Proposed Cat 6 (-dB)
NEXT	55.1	≥54.0
Power sum NEXT	52.0	≥50.0
FEXT	49.8	≥43.1
Power sum FEXT	46.9	≥40.1
Attenuation	0.1	≤0.2
Return Loss	27.0	≥23.0

## MECHANICAL CHARACTERISTICS

### Cable

Gauge	23 AWG with PE insulation, CMR fire rated
Pair Count	4 pair individually colour coded with filler and PVC jacket
Sequence	Wiring sequences in 568 A & B
Durability	1000 mating cycles
RJ45 Plug	Polycarbonate, FCC Part68 Subpart F, UL 94V-0
Plug Boot	PVC
Contact Material	Phosphor bronze with 50 micro-inches gold over 100 micro-inches nickel

## ELECTRICAL CHARACTERISTICS

Dielectric strength	1000 V RMS at 60 Hz for 1 minute
Voltage rating	150 VAC maximum
Current rating	1.5 A maximum
Insulation Resistance	500 M $\Omega$ minimum
Contact resistance	10 m $\Omega$ maximum

CATALOGUE NO.	DESCRIPTION	UL Cross-Ref No.
	RJ45 to RJ45 Patch Cord	
<b>RJ6A8/05PL, BU</b>	0.6m (2ft), Blue	CP103006
<b>RJ6A8/10PL, BU</b>	1.2m (4ft), Blue	CP103007
<b>RJ6A8/20PL, BU</b>	2.1m (7ft), Blue	CP103008
<b>RJ6A8/30PL, BU</b>	3.0m (10ft), Blue	CP103009
<b>RJ6A8/40PL, BU</b>	4.6m (15ft), Blue	CP103010
<b>RJ6A8/05PL, WE</b>	0.6m (2ft), White	CP103000
<b>RJ6A8/10PL, WE</b>	1.2m (4ft), White	CP103001
<b>RJ6A8/20PL, WE</b>	2.1m (7ft), White	CP103002
<b>RJ6A8/30PL, WE</b>	3.0m (10ft), White	CP103003
<b>RJ6A8/40PL, WE</b>	4.6m (15ft), White	CP103004

# Cat 6+ Modular Jacks

Clipsal 30-Mech / Keystone / Uni-Mech Styles

The Clipsal Professional Series Category 6+ (CP6+) Modular Jack is a superior product delivering the best network performance when used in conjunction with other Clipsal Professional Series Category 6+ products.

The Modular Jack exceeds the proposed Category 6 transmission requirements, in some parameters providing usable bandwidth up to 300MHz.

The Modular Jack is based upon lead frame technology and comes in 3 different styles according to the application. The styles include the Clipsal 30-Mech, Keystone and Uni-Mech. The 30-Mech is designed for use in wall plate applications while the Uni-Mech is designed for use in configurable applications such as the CP6+ Configurable Patch Panel or other Clipsal multimedia receptacles and faceplates. The Keystone is designed to snap into standard Keystone openings.

All 3 styles accept 110, Krone, Gigapro and Bix tools, making it extremely versatile for installers. Colour coding allows for termination of both 568A and 568B.

As an integral part of the CP6+ series, this product has a lifetime warranty and system performance guarantee when installed by a Certified Clipsal Systems Installer/Integrator.

## PRODUCT FEATURES

- Performs beyond the proposed Category 6 ANSI/TIA/EIA-568-B.2 draft Standard.
- Available in White and Black, other colours in Q2 2002.
- Backward compatible with Category 5 and 5E products.
- Compatible with 110, Krone, GigaPro and Bix tools.
- UL 94V-0 rated.
- Accepts solid 22-24 AWG diameter conductors.
- New Wall Plate range to be available Q3 2002.

## CUSTOMER BENEFITS

- Performs beyond the proposed Category 6 standard, providing customers with the satisfaction of having a compliant product once Category 6 ratification is made.
- Various colours for easier circuit identification.
- Is backward compatible with Category 5 and 5E products, allowing component mixing without degrading the network below the minimum component category.
- 30-Mech style fits all Clipsal Wall Plates (US and British), giving the customer access to the most popular plates on the market.
- For use in Multi-user Telecommunication Outlet Applications (MUTOA) and Consolidation Points (CP).
- Clear IDC caps that allow for termination verification and assist in cable retention.
- Compatible with 110, Krone, GigaPro and Bix tools; allowing for a wider choice for installers.
- Comes with the Clipsal Lifetime Warranty - a unique feature to the market! Offering the customer peace of mind for today and into the foreseeable future.

## DIMENSIONS

**30-Mech** 23.1mm (H) x 23.1mm (W) x 34.70mm (D)

**Keystone** 22.12mm (H) x 21.47mm (W) x 35.33mm (D)

**Uni-Mech** 20.80mm (H) x 19.70mm (W) x 34.70mm (D)



Keystone



30-Mech



Uni-Mech

## TECHNICAL SPECIFICATIONS

@100MHz (-dB)	NEXT	≥55.1
	PSNEXT	≥52.0
	FEXT	≥49.8
	PSFEXT	≥46.9
	Attenuation	≤0.10
	Return Loss	≥27.0

## MECHANICAL CHARACTERISTICS

### Jack Connector

RJ45 8-Pin Connector	FCC part 68, Subpart F and IEC-603-7 compliant
Durability	1000 mating cycles
Material	Phosphor Bronze with 50 micro-inches gold over 100 micro-inches nickel

### IDC Connector

Connector	Insulation slicing of 22 to 24 AWG (0.64 to 0.51mm)
Durability	10 insertions of any combination of wire gauge
Material	Phosphor Bronze with nickel plating
Encapsulated Clips	In fire-retardant, UL 94V-0, plastic

## ELECTRICAL CHARACTERISTICS

Dielectric Strength	1,000V RMS at 60Hz for 1 minute
Current Rating	1.5A maximum
Insulation resistance	200MΩ minimum
Contact resistance	1 mΩ per contact

CATALOGUE NO.	DESCRIPTION	UL Cross-Ref No.
<b>RJ88AB6 (WE)</b>	Clipsal Style 30-Mech, White	CP600213
<b>RJ88AB6 (BK)</b>	Clipsal Style 30-Mech, Black	CP600214
<b>RJ88AB6K (WE)</b>	Standard Keystone Style, White	CP600232
<b>RJ88AB6K (AL)</b>	Standard Keystone Style, Almond	CP600231
<b>RJ88AB6U (WE)</b>	Uni-Mech Style, White	CP600202
<b>RJ88AB6U (BK)</b>	Uni-Mech Style, Black	CP600203

# Cat 6+ Configurable Patch Panel

The Clipsal Professional Series Category 6+ (CP6+) Patch Panel is a superior product delivering the best network performance when used in conjunction with other Clipsal Professional Series Category 6+ products.

Patch Panels are mountable in rack or wall unit environments and allow for cross-connections between vertical and horizontal cabling or between Active equipment such as Switches and Hubs. Patch Panels come in a 1U configuration and are constructed of metal, which is powder-coated graphite grey. The panel is fully configurable and comes unloaded. It is available in a 24 Port configuration. The Patch Panel has been designed to accommodate up to 24 Clipsal Uni-Mech Category 5E and/or Category 6+ Modular Jacks providing superior performance with an elegant and sleek appearance. The Patch Panel comes standard with a Rear Cable Management Bar, cable ties, mounting screws and labeling for installation.

As an integral part of the CP6+ series, this product has a lifetime warranty and system performance guarantee when installed by a Certified Clipsal Systems Installer/Integrator.

## PRODUCT FEATURES

- Powder coated to protect against scratches and rust.
- Available in Graphite Grey.
- A sleek and aesthetic design and appearance.
- A front labeling system.
- Compatible with standard 19" equipment racks.
- Available in 24 ports.
- Field configurable.
- Comes with a Rear Cable Management Bar.

## CUSTOMER BENEFITS

- Provision for front labeling system provides for easier circuit identification and assists in avoiding potential patching mistakes.
- Being field configurable it allows the customer to self-determine their rack space requirements and to only spend money on the Category 6 ports that are to be used.
- Accepts Category 5E Uni-Mech Modular Jacks. Multi-media modules will become available during 2002.
- The Rear Cable Management Bar allows proper management of cable terminations and upgrades.
- Comes with the Clipsal Lifetime Warranty - a unique feature to the market! Offering the customer peace of mind for today and into the foreseeable future.



## TECHNICAL SPECIFICATIONS

### Materials

Panel	16-gauge steel, powder coated graphite grey
Module Holder	UL 94 HB, fire retardant plastic, graphite grey

### DIMENSIONS

#### Module

Shipping Box	51mm(H) x 502mm(W) x 60mm(D)
Shipping Weight	450g

CATALOGUE NO.	DESCRIPTION	UL Cross-Ref No.
31071U24PPB	1U 24 port panel	CP600300

# Cat 6+ GigaPro Voice and Data Block Cabling Solution



The Clipsal Professional Series Category 6+ (CP6+) GigaPro Voice and Data Block Cabling Solution is a superior product delivering the best network performance when used in conjunction with other Clipsal Professional Series Category 6+ products.

The new solution allows for very high termination density while maintaining ease of administration for adds, moves and changes providing the best performance-to-price ratio for high-performance connectivity.

The main feature of the solution is the Clipsal 25 pair IDC connector blocks available in 4 or 5 pair marked configurations. The connector blocks have a gas tight connection with the capability of using either Patch Cords or Jumper Wires. The IDC's accept 22-26 AWG (0.64mm - 0.4mm) conductors and are suitable for up to 200 insertions. Terminations are made using a Bix or GigaPro termination tool.

Connector Blocks are mounted onto the Clipsal GigaPro Wall Frame. Other features of the frame that is available as separate items include Designation Strip Label Holders, Conductor Clamps and Cable Management Rings.

As an integral part of the CP6+ series, this product has a lifetime warranty and system performance guarantee when installed by a Certified Clipsal Systems Installer/Integrator.

## PRODUCT FEATURES

- Performs beyond the latest proposed ANSI/TIA/EIA-568-B.2 Category 6 draft standard.
- Usable bandwidth to 300 MHz.
- UL 94V-0 rated.
- Backward compatible with Category 3, 4, 5 and 5E products.
- Powder-coated Back Mount Wall Frame.
- A high-density solution.
- Snap-on connector blocks.
- A plastic front cover.

## DIMENSIONS

### IDC Connector Module (12 per box)

Shipping Box	95mm(H) x 250mm(W) x 160mm(D)
Shipping Weight	500g

### Wall Frame (1 per box)

Shipping Box	458mm(H) x 203mm(W) x 130mm(D)
Shipping Weight	3kg

## CUSTOMER BENEFITS

- Performs beyond the latest proposed Category 6 standard, providing customers with the satisfaction of having a compliant product once Category 6 ratification is made.
- A Back Mounted Wall Frame that is powder-coated to provide protection against scratches and rust.
- A high-density solution that not only saves valuable space but is also very cost effective.
- Is backward compatible with Category 3, 4, 5 and 5E products, allowing for component mixing without a degradation to the network below the minimum component category.
- Offers a Voice Solution through Category 6+ using either Jumper Wiring or Patch Cords - which amounts to complete flexibility for the customer.
- The Back Mount allows for an easy snap in of the connector blocks, which makes installation easier and quicker.
- Built-in pair splitters for faster installation.
- An optional plastic cover that protects the modules and provides a neat finish to the installation.
- Comes with the Clipsal Lifetime Warranty - a unique feature to the market! Offering the customer peace of mind for today and into the foreseeable future.

## TECHNICAL SPECIFICATIONS

### IDC Connector Blocks

@100MHz (-dB)		
NEXT		58.9
PSNEXT		55.9
FEXT		58.8
PSFEXT		55.8
Attenuation		0.18
Return Loss		37.3

## MECHANICAL CHARACTERISTICS

Connector Module Strength	Fire retardant thermoplastic rated 94V-0
Wire Gauge	22-26 AWG (0.64, 0.5 and 0.4 mm)
IDC Clip	Phosphor Bronze with tin plating over nickel
Durability	200 insertion cycles using any wire gauge

## ELECTRICAL CHARACTERISTICS

### IDC Connector Blocks

Dielectric Strength	1,000V RMS at 60Hz for 1 minute
Current Rating	1.5A maximum
Insulation resistance	100M $\Omega$ minimum between clips
Contact resistance	1m $\Omega$ per contact

CATALOGUE NO.	DESCRIPTION	UL Cross-Ref No.
310725/5IDCB	25 Pr IDC connector block w/5 Pr marking, smoked white block	CP200103
310725/4IDCB	25 Pr IDC connector block w/4 Pr marking, smoked white block	CP200105
3107WMF300PR	CP300 Pair Metal Wall Mount Frame	CP200100
3107PDSLH	Designation strip label holder	CP200101
3107PCCL	Conductor clamp	CP200102
3107LCMR	Cable management ring	CP200107

# Cat 6+ GigaPro Patch Cord

The Clipsal Professional Series Category 6+ (CP6+) GigaPro Patch Cord is a superior product delivering the best network performance when used in conjunction with other Clipsal Professional Series Category 6+ products.

The Patch Cords are constructed of high grade CP6+ (23 AWG) cable and quality RJ45 plugs and IDC patch connector plugs. They are designed to operate successfully in a Category 6 environment, while still being backward compatible. GigaPro Patch Cord come in black with matching boots, plugs and connector bodies. They are available in 4 different lengths and in 2 different styles; IDC-to-IDC or IDC-to-RJ45 configurations. They are used for patching between Cross-Connect fields on the Clipsal GigaPro Voice and Data Block System in the Building Distributor (Main Distribution Frame) and the Floor Distributor (Telecommunications Room) in both horizontal distribution or equipment interface applications. Patching can also be performed using Jumper Wire.

As an integral part of the CP6+ series, this product has a lifetime warranty and system performance guarantee when installed by a Certified Clipsal Systems Installer/Integrator.



## PRODUCT FEATURES

- Performs beyond the latest proposed Category 6 ANSI/TIA/EIA-568-B.2 draft Standard.
- UL CMR Fire rated jacketing.
- PE insulation on conductors.
- Black PVC outer jacket material.
- Backward compatible with Category 5 and 5E products.
- Available in 4 lengths and 2 styles.
- Packed individually in plastic bags with header cards for some markets.

## CUSTOMER BENEFITS

- Performs beyond the latest proposed Category 6 ANSI/TIA/EIA-568-B.2 draft Standard, providing customers with the satisfaction of having a compliant product once Category 6 ratification is made.
- Is backward compatible with Category 5 and 5E products, allowing for component mixing without a degradation to the network below the minimum component category.
- Comes in various lengths to assist in better cable management.
- Comes with the Clipsal Lifetime Warranty - a unique feature to the market! Offering the customer peace of mind for today and into the foreseeable future.

## DIMENSIONS

Shipping Weight	IDC-to-IDC	IDC-to-RJ45
1.2 meter (4 ft.)	17g	14g
2.1 meter (7 ft.)	22g	19g
3.0 meter (10 ft.)	28g	25g
4.6 meter (15 ft.)	40g	37g

## TECHNICAL SPECIFICATIONS

Parameter – channel performance	Value
Power sum NEXT	≥42.0 dB
Attenuation	≥18.4 dB
Power sum ACR	≥23.6 dB
PSELFEXT	≥25.0 dB
Return Loss	≤13.0 dB
Propagation Delay	490 ns
Delay Skew	25 ns

## MECHANICAL CHARACTERISTICS

### Plastic Housing

IDC Housing	Fire-retardant thermoplastic rated UL94V-0, Black
Modular Plug	8 pin modular plug, FCC part 68 subpart F compliant

### IDC Connector

Material	Phosphor bronze with tin plating over nickel
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## ELECTRICAL CHARACTERISTICS

Dielectric Strength	1,000V RMS at 60Hz for 1 minute
Current Rating	1.5 A maximum
Insulation Resistance	100 MΩ minimum between IDC clips
Contact Resistance	3 mΩ per contact

### Jumper Wire

DC Resistance	9.38 Ω/100m maximum
Mutual Capacitance	6.6 nF/100m @ 1 KHz maximum
Characteristic Impedance	100 Ω nominal

CATALOGUE NO.	DESCRIPTION	UL Cross-Ref No.
<b>IDC-IDC Patch Cord</b>		
<b>3107IDCPC1M</b>	1.2 meter (4 ft.)	CP200340
<b>3107IDCPC2M</b>	2.1 meter (7 ft.)	CP200341
<b>3107IDCPC3M</b>	3.0 meter (10 ft.)	CP200342
<b>3107IDCPC4M</b>	4.6 meter (15 ft.)	CP200343
<b>IDC-RJ45 Patch Cord</b>		
<b>3107IDCRJ1M</b>	1.2 meter (4 ft.)	CP200330
<b>3107IDCRJ2M</b>	2.1 meter (7 ft.)	CP200331
<b>3107IDCRJ3M</b>	3.0 meter (10 ft.)	CP200332
<b>3107IDCRJ4M</b>	4.6 meter (15 ft.)	CP200333
<b>Jumper Wire</b>		
<b>31071PR5JW</b>	1 pair 24 AWG CAT.5	CP200201
<b>31074PR5EJW</b>	4 pair 24 AWG CAT.5E	CP200202
<b>31074PR6EJW</b>	4 pair 24 AWG CAT.6	CP200203

