

Clipsal Professional Category 6+ (CP6+)

Cat 6+ Patch Cord

Cat 6+ Modular Jacks

Cat 6+ Configurable Patch Panel

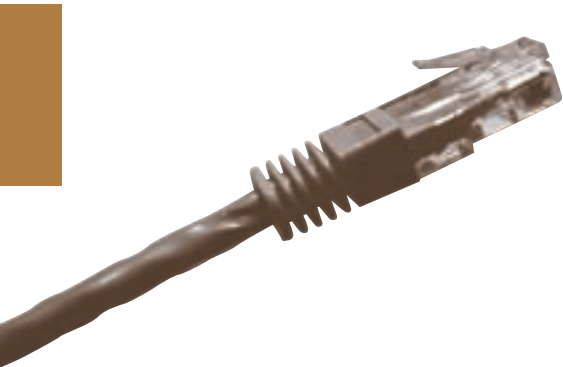
Cat 6+ Patch Panel

Cat 6+ Gigapro Voice and Data Block Cabling Solution

Cat 6+ Gigapro Patch Cords



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 Category 6 TIA/EIA 568-B.2-2, ISO/IEC 11801 Ed1.2 2000-01, AS/NZS 3080(int): 2002 Standards.
- UL CMR fire rated jacketing.
- PE insulation on conductors.
- PVC outer jacket material.
- Available in multiple lengths.
- Backward compatible with Category 5 and 5e products.

CUSTOMER BENEFITS

- Performs beyond the latest Category 6 international Standards
- Comes in White and Blue 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	1.0 metre	7g/pack of one
	1.5 metre	11g/pack of one
	2.0 metre	14g/pack of one
	3.0 metre	20g/pack of one

TECHNICAL SPECIFICATIONS

Parameter	Value (-dB)	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 sequence 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	500mΩ minimum
Contact Resistance	10mΩ maximum

CAT. NO.	DESCRIPTION	UL Cross-Ref No.
	RJ45 to RJ45 Patch Cord	
RJ6A8/05PL, BU	0.6m (2ft), Blue	CP103006
RJ6A8/10PL, BU	1.2m (4ft), Blue	CP103007
RJ6A8/20PL, BU	2.1m (7ft), Blue	CP103008
RJ6A8/30PL, BU	3.0m (10ft), Blue	CP103009
RJ6A8/40PL, BU	4.6m (15ft), Blue	CP103010
RJ6A8/05PL, WE	0.6m (2ft), White	CP103000
RJ6A8/10PL, WE	1.2m (4ft), White	CP103001
RJ6A8/20PL, WE	2.1m (7ft), White	CP103002
RJ6A8/30PL, WE	3.0m (10ft), White	CP103003
RJ6A8/40PL, WE	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 Category 6 transmission requirements, providing usable bandwidth up to 300MHz.

The Modular Jack is based upon lead frame technology and comes in 3 different styles according to the mounting application. The styles include the Clipsal 30-Mech, Keystone and Uni-Mech. The 30-Mech is designed for use in Clipsal 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 the Clipsal GigaPro, 110, Krone and Bix tools, making it extremely versatile for installers. Colour coding allows for termination of both 568A and 568B wiring sequences.

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

- TIA/EIA 568-B.2-2, ISO/IEC 11801 Ed 1.2, 2002-01 and AS/NZS 3080 (Int): 2002 Standards
- Available in White and Black.
- Backward compatible with Category 5 and 5e products.
- Compatible with Clipsal GigaPro, 110, Krone and Bix and tools.
- UL 94V-0 rated.
- Accepts solid 22-24 AWG diameter conductors.

CUSTOMER BENEFITS

- Performs beyond the Category 6 Standards.
- 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 (Australian, US and British), giving the customer access to the most popular plates on the market.
- For use in Multi-user telecommunication outlet applications (MUTO) and Consolidation points (CP).
- Clear IDC caps that allow for termination verification and assist in cable retention.
- Compatible with Clipsal GigaPro, 110 Krone and Bix tools, allowing for a wider choice of tools 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

Parameter	Value (-dB)	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

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	1mΩ per contact

CAT. NO.	DESCRIPTION	UL Cross-Ref No.
RJ88AB6 (WE)	Clipsal Style 30-Mech, White	CP600213
RJ88AB6 (BK)	Clipsal Style 30-Mech, Black	CP600214
RJ88AB6K (WE)	Standard Keystone Style, White	CP600232
RJ88AB6K (AL)	Standard Keystone Style, Almond	CP600231
RJ88AB6U (WE)	Uni-Mech Style, White	CP600202
RJ88AB6U (BK)	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 6e, 5e Uni-Mech Modular Jacks. Multi-media modules will become available during 2003.
- 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

CAT. NO.	DESCRIPTION
31071U24PPB	1U 24 port panel CP600300

Cat 6+ Patch Panel with Rear Tie Down Plate

The Clipsal Professional Series Category 6+ Patch Panel with rear Tie Down Plate is a superior product, delivering the best network performance when used in conjunction with other Clipsal Professional Series Category 6 products.

The Patch Panel has a nice look about it that combines performance with appearance. The Patch Panel consists of a metal face and rear connector latching panel with a metal Tie Down Plate. The Tie Down Plate is supplied loose, and can easily be connected and disconnected from the rear of the Patch Panel. The Patch Panel is fabricated from sheet metal, then powder-coated for durability.

The panel is configured with 24 individual Category 6+ Keystone modular connectors. These sit flush with the front of the Patch Panel, giving it a nice neat appearance. The modular connectors are held firmly in place by the rear connector latching panel, enabling the installer to terminate the cable directly onto the modular connectors in the Patch Panel. To help the installer with his termination sequence, the connector latching panel is numbered 1 to 24 (silk screened) on the rear of the connector latching panel above each connector.

The Category 6+ modular connectors are individually colour coded for both 568A and 568B. Sequence and termination of the individual wires can be made using the Clipsal GigaPro, Krone LSA+ and 110 style compatible tooling. The connectors are supplied with clear IDC covers to provide additional cable strain relief.

The front of the Patch Panel comes fitted with four designation strip label holders, and a designation strip label kit is supplied comprising 6 sets (4 labels per set) of different coloured labels.

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.

PRODUCT FEATURES

- Lead frame technology better than Category 6 performance.
- Powder-coated in Graphite Grey.
- 1 Rack-unit high, aesthetic design and neat appearance.
- IDC termination using Clipsal GigaPro tool and other industry standard Krone LSA+ and 110 style tools.
- Front designation strip label holders.
- Removable rear Tie Down Plate.
- Supplied complete with Velcro™ cable ties, cage nuts and screws, and designation strip label kit.
- Universal colour-coding for 568A and 568B termination sequences.
- Re-terminable IDC contacts that allow for wiring changes without damage to the Patch Panel.
- Compatible with Standard 19" equipment frames.
- Available in 24 ports in 1RU size.
- Fully compliant to AS/NZS 3080(Int):2002, ISO/IEC 11801 Edition 1.2 2000-01 and ANSI/TIA/EIA-568-B. Series Connecting Hardware Standards.

DIMENSIONS

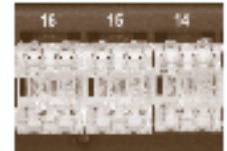
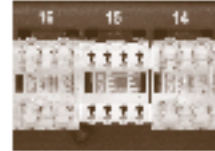
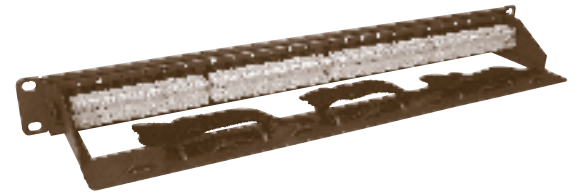
For 1RU size Patch Panel

Shipping Box 1RU 60mm (H) x 502mm (W) x 125mm(D)

Shipping Weight 1.275 Kg

CUSTOMER BENEFITS

- Comes complete with all mounting and cable fixing hardware allowing the installer to complete the installation without having to go and buy additional fixing items.
- Comes with the rear Cable Tie Down Plate loose, thereby allowing the installer to decide if this should be connected before or after cables are dressed in the equipment frame.
- The front labelling system provides a clear and efficient way of maintaining circuit identification and administration. Front labelling can be done using the supplied label cards, a Brother P-touch or similar type labelling device, or soon-to-be released CLIPSAL Label program using an on-site laser printer.
- The graphite Grey metal powder-coating provides protection from scratches during installation and protects against general corrosive elements.
- Being fully compliant with all International Connecting Hardware Standards gives the customers peace of mind, and confidence that their network will perform to Channel and Application Standards when used in conjunction with other CLIPSAL Datacomms Standards compliant product.
- The product comes with the Clipsal Lifetime Warranty – a unique feature to the market. This warranty offers the customer peace of mind, not just for today, but for the foreseeable future.



TECHNICAL SPECIFICATIONS

Transmission performance (-dB) at 100MHz.

Parameter	Value (-dB)	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	≥24.0

MECHANICAL CHARACTERISTICS

Modular Connector.

RJ45 8-Pin Connector	FCC part 68, Subpart F and IEC-60603-7 compliant
Durability	1000 mating cycles
Material	Phosphor Bronze with 50 micro-inches of gold over 100 micro-inches nickel plating

IDC Connector

IDC Connector	Insulation slicing of 22 to 24 AWG (0.64 to 0.41mm)
Durability	10 insertions of any combination of wire gauge - one wire per slot.
Connector Material	Phosphor Bronze with nickel plating
IDC body & cover Material	Fire-retardant, UL 94V-0, plastic

ELECTRICAL CHARACTERISTICS

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

CAT. NO.	DESCRIPTION
31071U24KPPG	24 Port Cat.6 Keystone Patch Panel with cable Tie Down Plate.

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 additions, 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 accepts 22-26 AWG (0.64mm - 0.4mm) conductors and are suitable for up to 200 insertions. Terminations are made using the GigaPro termination tool.

Connector Blocks are mounted onto the Clipsal GigaPro Wall Frame. Other features of the frame that are 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 ANSI/TIA/EIA-568-B.2 Category 6 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 Category 6 Standard
- 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

Parameter	Value (-dB)	Cat 6 (-dB)
NEXT	58.9	≥54.0
PSNEXT	55.9	≥50.0
FEXT	58.8	≥43.1
PSFEXT	55.8	≥40.1
Attenuation	0.18	≤ 0.2
Return Loss	37.3	≥23.0

MECHANICAL CHARACTERISTICS

Connector	Fire retardant thermoplastic
Module Strength	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	100mΩ minimum between clips
Contact Resistance	1mΩ per contact

CAT. 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 Cords

The Clipsal Professional Series Category 6+ (CP6+) GigaPro Patch Cords are superior products 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 backwards 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 Category 6 ANSI/TIA/EIA-568-B.2 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 Category 6 ANSI/TIA/EIA-568-B.2 Standard, providing customers with the satisfaction of having a compliant Category 6 channel.
- 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 metre (4 ft.)	17g	14g
2.1 metre (7 ft.)	22g	19g
3.0 metre (10 ft.)	28g	25g
4.6 metre (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	100m Ω minimum between IDC clips
Contact Resistance	3m Ω 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

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