Cat.6 4 Pair UTP Cable

**Application:**
- Voice
- Fast Ethernet (IEEE 802.3u)
- 100Vg-AnyLAN (IEEE 802.12)
- Token Ring (IEEE 802.5)
- TP-PMD (ANSI X3T9.5)
- 100Base-T Ethernet (IEEE 802.5)
- 155/622 Mbps 1.2/ 2.4 Gbps ATM
- 1000Base-T Ethernet
- 550 MHz Broadband video

**Industry Standard:**
- UL, ETL Verified
- TIA/EIA 568B.2-1
- ISO/IEC 11801
- EN 50173

**Cable Data:**
- No. of Pairs: 4
- Jacket Color: Gray
- Insulation Thickness: 0.33mm
- Nom. O.D.: 6.5mm
- Flame Rating: CM
- Transmission quality verified up to 250MHz

**Product Electrical Characteristics:**
- Impedance: 100±15 ohms
- Mutual Capacitance, max. nF/100m: 5.6
- DC Resistance, max. Ohms/100m: 9.38
- Capacitance Unbalance (Pair to Ground): 330pf/100m max.

**P/N** | **Description** | **Jacket** | **Color** | **Std Pkg Qty**
--- | --- | --- | --- | ---
1101-04001 | Cat.6, 4P, UTP, 24AWG, Solid | PVC | Gray | 305M/reel in a box
1101-04004 | Cat.6, 4P, UTP, 24AWG, Solid | PVC | Gray | 305M/Pull box

For LSZH requirements, please contact us.

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Attenuation Max. dB/100m</th>
<th>NEXT dB/100m</th>
<th>Power Sum Minimum dB/100m</th>
<th>EFLEXT (dB/100m)</th>
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</tbody>
</table>
### Cat.6 UTP Patch Cord

**Application:**
- Voice
- Fast Ethernet (IEEE802.3u)
- 100Vg-AnyLAN (IEEE 802.12)
- Token Ring (IEEE 802.5)
- TP-PMD (ANSI X3T9.5)
- 100Base-T Ethernet
- 155/622 Mbps 1.2/ 2.4 Gbps ATM
- 1000Base-T Ethernet
- 550 MHz Broadband video

**Product Description:**
- Molded boots prevent pin from bending and cables from kinking
- Fully tested to meet TIA/EIA-568B.2-1 Category 6 requirements
- Category 6 stranded 24AWG wires provides maximum flexibility
- ETL verified to EIA/ TIA-568B specifications
- UL listed
- Wiring: T568B

**Industry Standard:**
- UL, ETL Verified
- TIA/EIA 568B.2-1
- ISO/IEC 11801
- EN 50173

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Length (M)</th>
<th>Color</th>
<th>Std Pkg Qty</th>
</tr>
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<td>1201-04032</td>
<td>Cat.6 4 pair UTP patch cord</td>
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<tr>
<td>1201-04038</td>
<td>Cat.6 4 pair UTP patch cord</td>
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<tr>
<td>1201-04044</td>
<td>Cat.6 4 pair UTP patch cord</td>
<td>3</td>
<td>Gray</td>
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<tr>
<td>1201-04051</td>
<td>Cat.6 4 pair UTP patch cord</td>
<td>5</td>
<td>Gray</td>
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</tbody>
</table>

### Cat.6 unshielded RJ45 plug

*To meets EIA/TIA568B.2-1 performance.*

**Specifications:**
- Contact Material: Phosphor Bronze
- Contact Plating: 50u" Gold plated Over 100u"-Nickel Plated.
- Contact Resistance: 10 milli ohms Max.
- Housing Material: Polycarbonate
- Operation Temperature: -40°C~+70°C

**Mechanical:**
- Durability: 750 cycles min.

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Std Pkg Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1501-88017</td>
<td>Cat.6 RJ45 plug for unshielded stranded wire 26-24AWG 2 prong, 2 pieces construction</td>
<td>100</td>
</tr>
<tr>
<td>1501-88018</td>
<td>Cat.6 RJ45 plug for unshielded stranded wire 26-24AWG 2 prong</td>
<td>100</td>
</tr>
<tr>
<td>1501-88027</td>
<td>Cat.6 RJ45 plug for unshielded solid wire 26-24AWG 3 prong</td>
<td>100</td>
</tr>
<tr>
<td>1501-88028</td>
<td>Cat.6 RJ45 plug for unshielded solid wire 26-24AWG 3 prong, 2 pieces construction</td>
<td>100</td>
</tr>
</tbody>
</table>
Cat.6 Unshielded Patch Panel

110 Enhanced Cat.6 Patch Panel:
- High performance, exceeds TIA/EIA 568B.2-1 Category 6 channel link requirements
- 110 and Krone dual type IDC termination
- 19” 24 port patch panel, 1U size & 48 port panel, 2U size
- Accepts 22-26 AWG, stranded or solid wire
- Wiring: T568A/ B
- Optional rear cable management

IDC connector with large spacer for each pair to improve crosstalk
High-low contact design to improve transmission performance
Compliant Press fit IDC connector terminal for high frequency application

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Std. Ctn. Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1402-04001</td>
<td>Cat.6 19” 110/ krone dual type Patch Panel</td>
<td>25</td>
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<tr>
<td></td>
<td>24 ports, 1U size</td>
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</tr>
<tr>
<td>1402-04003</td>
<td>Cat.6 19” 110/ krone dual type Patch Panel</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>48 ports, 2U size</td>
<td></td>
</tr>
<tr>
<td>1499-00001</td>
<td>19” Rear cable management</td>
<td>45</td>
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</tbody>
</table>

Installing the wire management

**Step 1.** Align the tongue of the minder with the corresponding groove on the patch panel and insert it into the groove.

**Step 2.** After installing two jacks, use a tie wrap to attach their wires to the wire manager. Do not over tighten the tie wrap! It crushes the wires. Continue this until all the jacks have been installed.
**Cat.6 Keystone Jack**

**Industry Standard:**
- UL, listed
- Meets FCC parts 68
- ANSI/TIA/EIA-568B
- ISO/IEC 11801
- ETL verified TIA/EIA 568B.2-1:

Cat.6 channel link transmission performance

**Electrical:**
- Current rating: 1.5 Amps
- Insulation resistance: 500 Mega-ohms min.
- Contact resistance: 20 Milli-ohms max.
- DC resistance: 0.1 ohms max.
- Data transmission rates up to 250Mbps

**Physicals:**
- IDC connector accept 22-26 AWG solid wire
- Jack wiring: 50 μ” gold plated over 100 μ” nickel
- Housing: High impact flame retardant plastic UL94V-0 rated
- IDC connector suitable for 110 punch down and Krone tool

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Std Pkg Qty</th>
<th>Std Ctn Qty</th>
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<tbody>
<tr>
<td>1305-04002</td>
<td>Cat.6 110/ Krone horizontal type Keystone Jack, T568A/B</td>
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<td>1305-04003</td>
<td>Cat.6 110/ Krone vertical type Keystone Jack, T568A/B</td>
<td>100</td>
<td>400</td>
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**Channel passive performance test configuration - ETL & 3P verified**
### High Quality Cat.6 110 Cross-Connect Block

- Exceeds TIA/EIA 568B.2-1 category 6 standard
- Ideal for use in cross connections and consolidation point applications
- Highly visible color-coded wiring slots for easy wiring
- Mounts to standard TIA/EIA 19" racks
- Available with or without mounting legs for a variety of mounting options
- Can be terminated with single or multiple position punch down tools

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Std. Ctn. Qty</th>
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<tbody>
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<td>1802-01006</td>
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<tr>
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<td>1802-04001</td>
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<td>Cat.6 connecting blocks 4 pair</td>
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**Cat.6 4 Pair S-STA Cable**

**Application:**
- Voice
- Fast Ethernet (IEEE802.3u)
- 100VG-AnyLAN (IEEE 802.12)
- Token Ring (IEEE 802.5)
- TP-PMD (ANSI X3T9.5)
- 100Base-T Ethernet (IEEE 802.5)
- 155/622 Mbps 1.2/ 2.4 Gbps ATM
- 1000Base-T Ethernet
- 550 MHz Broadband video

**Industry Standard:**
- According to UL444 Communications Cables, UL AWM style 2835
- TIA/EIA 568B.2-1

**Product Electrical Characteristics:**
- Impedance: 100±15 ohms
- Mutual Capacitance: nom. 13.6pf/ft
- DC Resistance: max. 6.8ohm/100m at 20°C
- Voltage rating: 30V
- Rated temperature: 60°C

**Cable Data:**
- No. of Pairs: 4 pair
- Size of conductor: 23AWG (solid anneal copper wire)
- Overall Diameter: 7.4±0.3mm
- Individual Shielding: Aluminum-foil laminated tape.
- Jacket material: PVC or LSZH, flame retardant and/or CM grade.

<table>
<thead>
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<th>Description</th>
<th>Jacket</th>
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<td>PVC</td>
<td>305m (1000ft) / reel</td>
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<tr>
<td>1107-04002</td>
<td>Cat.6 4P S-STA 23AWG solid</td>
<td>LSZH</td>
<td>305m (1000ft) / reel</td>
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<table>
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<th>NEXT dB/100m</th>
<th>Power Sum Min. dB/100m</th>
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<th>Return Loss (dB/100m)</th>
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### Cat.6 S-STP Patch Cord

**Application:**
- Voice
- Fast Ethernet(IEEE802.3u)
- 100Vg-AnyLAN(IEEE 802.12)
- Token Ring(IEEE 802.5)
- TP-PMD(ANSI X3T9.5)
- 100Base-T Ethernet(IEEE 802.5)
- 155/622 Mbps 1.2/ 2.4 Gbps ATM
- 1000Base-T Ethernet
- 550 MHz Broadband video

**Cable Data:**
- No. of pairs: 4
- Size of conductor: 26AWG (Stranded Anneal copper wire)
- Dielectric material: Foamed P.E
- Diameter of Dielectric core: 1.0±0.05mm
- Individual Shielding: Aluminum-foil laminated tape
- Overall Shielding: Tinned copper wire braiding, normal with min. 65% coverage.
- Jacket: PVC, flame retardant CM grade
- O.D.: 5.7±0.2mm

### Industry Standard:
- According to UL444 Communication cables, UL AWM style 2835
- TIA/EIA 568B.2-1
- ISO/IEC 11801

### Product Description:
- Molded boots prevent pin from bending and cables from kinking
- Fully tested to meet TIA/EIA-568B.2-1 category 6 requirements
- 50u" gold plating on RJ45 plug contacts.
- Durability: 750 cycles min.
- Wiring: T568B

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Length(M)</th>
<th>Color</th>
<th>Std Pkg Qty</th>
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<td>1201-04024</td>
<td>Cat.6 4P S-STP patch cord</td>
<td>3</td>
<td>Gray</td>
<td>10</td>
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<td>Cat.6 4P S-STP patch cord</td>
<td>5</td>
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</table>

- For special requirements please contact us

### Cat.6 shielded RJ45 plug

To meet EIA/TIA568B.2-1 performance.

**Specifications:**
- Contact Material: Phosphor Bronze
- Contact Plating: 50u" Gold plated Over 100u" Nickel Plated.
- Contact Resistance: 10 milli ohms Max.
- Housing Material: Polycarbonate
- Operation Temperature: -40°C ~ +70°C

**Mechanical:**
- Plug Dimensions: Meet F.C.C. Standard
- Durability: 750 cycles min.

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Std Pkg Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1501-88022</td>
<td>Cat.6 RJ45 Plug for shielded stranded wire 26-24AWG (2 Prong) 2 pieces construction</td>
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</tr>
<tr>
<td>1501-88029</td>
<td>Cat.6 RJ45 Plug for solid wire 26-24AWG (3 Prong) 2 pieces construction</td>
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</table>
**Cat.6 Fully Shielded Patch Panel**

**Features:**
- High performance, meets all Cat.6 channel link requirements specified in TIA/EIA-568B.2-1
- 100% shielded for complete EMI/RFI protection
- 19" 24port patch panel, 1U size.
- 110 and Krone dual type IDC termination
- Accepts 22-26AWG, Stranded or solid wire
- Wiring: T568A/B

**Physical:**
- Housing: High-impact, flame-retardant plastic, UL94V-0 rated spring wire/contact blades.
- Material: Phosphor Bronze Alloy.
- Plating: 24 Carat hard gold 50µ" plating thickness over 100µ" nickel.
- Sheel: Brass alloy plated with 100µ" nickel.
- Plate: SPCC-SD 16G.

**Electrical:**
- Insulation resistance: 10 Mega ohms min.
- Dielectric with standing voltage: 1,000 Volts, RMS, 60Hz, 1min.
- Contact resistance: 20 milli ohms max.
- Current rating: 1.5 AMPS at 20°C

**Mechanical:**
- Total mating force: 800 grams for a 8 wire leads min.
- Retention: 30 lbs min between the jack and plug.
- Insertion/Extraction life: 750 cycles minimum.
- Number of IDC terminations: 200 cycles minimum.

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Std. Ctn. Qty</th>
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</thead>
<tbody>
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<td>1402-04004</td>
<td>Cat.6 19” 110 type fully shielded patch panel</td>
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</tr>
<tr>
<td></td>
<td>24 ports, 1U size</td>
<td></td>
</tr>
</tbody>
</table>

*Grounding lock*
Step 1.
Strip approximately 7.7cm of the jacket from the cable. Be sure that the foil and/or braid remains intact.

Step 2.
For cable with foil but no braid:
Fold the foil shield back over the jacket of the cable.
For braided cable:
Slide the braid back over the wire, wrap jacket and, if there is a drain wire, wrap it around the braid close to the fold at least 3 times (See Step 5 for alternative drain wire instruction).

Step 3.
For cable with foil but no braid:
Wrap the drain wire around the foil shield. Do not wrap the drain wire more than 1.3cm from the fold in the foil shield. (See step 5 for alternative drain wire instruction).
For braided cable:
Unwrap the foil that extends beyond the jacket from each pair and cut it off.

Step 4.
For braided cables:
Insert the cable through the ground clip as shown.

Step 5.
Instead of wrapping the drain wire around the foil shield, the drain wire may be inserted into the ninth slot (the slot with no color code) on the IDC connecting block as shown.

Step 6.
Fasten the cable to the strain relief tabs with cable ties and trim off the excess cable tie.

Step 7.
Tighten the ground clip screw until it reaches the bottom. Ensure that there is no foil in contact with the ground clip.

Step 8.
Press the wires into the IDC connecting blocks according to the color code on the blocks. Punch the wires down with an impact tool in order to terminate them. Do not forget to terminate the drain wire if it has been inserted into the ninth slot.

Step 9.
Slide the rear cover into place and lock it into position by clasping the two plastic buttons. Attach a ground wire from the ground lug to a grounding
Cat.6 Fully Shielded Keystone Jack

**Transmission performance:**
- Meets all cat.6 channel performance requirements specified in TIA/EIA-568B.2-1

**Mechanical:**
- Total mating force: 800 grams for a 8 wire leads minimum.
- Retention: 30lbs min between the jack and plug.
- Insertion/Extraction life: 750 cycles minimum.
- Number of IDC terminations: 200 cycles minimum.

**Electrical:**
- Electrical insulation resistance: 10 mega ohms min.
- Dielectric with standing voltage: 1,000 V, RMS, 60Hz, 1min.
- Contact resistance: 20 milli ohms max.
- Current rating: 1.5 AMPS at 20°C

**Physical:**
- Housing: High-impact, flame-retardant plastic, UL94V-0 rated.
- Spring wire/contact blades:
- Material: Phosphor Bronze alloy.
- Plateing: 24 Carat hard gold (50u" plating thickness) over 100u" nickel.
- Shell: Brass alloy plated with 100u" nickel.

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
<th>Std Pkg Qty</th>
<th>Std Ctn Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1305-04006</td>
<td>Cat.6 110/ Krone horizontal type fully shielded keystone Jack, T568A/ B</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>1305-04007</td>
<td>Cat.6 110/ Krone vertical type fully shielded keystone Jack, T568A/ B</td>
<td>100</td>
<td>200</td>
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</tbody>
</table>

Right-angle fully shielded keystone jack installation step

**Step 1.** Preparing the Jack for termination

**Step 2.** Terminating the Jack

**Step 3.** Completing the termination

**Step 4.** Completing the Shield

**Step 5.** Adding the Strain Relief