

Copper Patch Cord

CAT 6 - UTP



Genius UTP Cat 6 Patch Cords are built for high-speed applications like ATM 622 Mbps and Gigabit Ethernet 1Gbps by using flexible cable and are terminated with two modular plugs wired as per TIA standards. Available in multiple colours and lengths.

Genius RJ45 Plug features superior cable retention for high pull strength and prevents pair deformation. It ensures precise wire placement for reliable, high performance.

Key Features

- Supports 10/100/1000BASE-T Ethernet and other high-speed data applications
- Compatible with 10GBASE-T (IEEE 802.3an) & 100 Mbps
- Injection molded Boot for enhanced life and reliability
- Complied to all Major Internationally Defined standards
- Plugs with 50-micron gold plating contacts
- Backward Compatible and Interoperable
- 100% tested at the factory
- UL Listed & RoHS v3 Complied
- Genius Network Brand performance warranty for 25 years

Product Specification

Type of cable	U/UTP
Conductor Material	Stranded Bare Copper
Conductor Size	7/0.20 ± 0.008 mm (24 AWG)
Insulation Material	HDPE
Insulation thickness	0.2±0.02 mm
Insulation Diameter	Nominal 1 mm ± 0.03 mm
Pair Color	Blue-White with Blue Orange-White with Orange Green-White with Green Brown-White with Brown
Pair Construction	4 Pairs
Cross Filler	X - Shaped separator
Cross Filler Material	HDPE
Sheath Material	LSZH / FR PVC
Sheath thickness	0.5 mm +/-0.05 mm
Tensile Strength (For Sheath)	Min. 0.917 Kgf/mm ²
Cable Diameter	6.0±0.3 mm
RJ45 Plug Housing Material	Polycarbonate, UL94V-0
RJ45 Plug Contact Blade and Plating	Copper Alloy with 50-micron gold
Strain Relief Boot Type	Moulded Boot
Wiring Scheme/Termination Standard	TIA568A /TIA568B
Supporting Length (for 25-year performance warranty)	1 Meter - 15 Meter
Backward Compatibility	Yes
Minimum Bending Radius - Operation/Installation	4D / 8D
Durability	750 Cycle
Plug Retention Force, minimum	133 N

Electrical Performance @ 20°C ±1°C

Operating Frequency	250 Mhz
Tested Frequency	600 MHz
Characteristic Impedance	100 Ω ±15 Ω @ 1-250 MHz
DC Resistance	≤ 9.38 Ω / 100 m
Conductor Resistance	Max.14.5 Ω/100 m
Resistance unbalance	Max. 2%
Mutual Capacitance	Max. 5600 pF/100m
Capacitance unbalance	Max. 330 pF/100m
Max propagation delay	5.3 ns/m max @ 100 MHz
Cable Skew	≤ 45 ns / 100 m
NVP	69% nominal
Max operating Voltage	300 V
Insulation Resistance	500 MΩ minimum
Dielectric Withstand	1500 V dc / 2 seconds

Standards, Certifications & Compliances

- UL Listed
- Compliance with UL 94
- RoHS v3 Compliant
- ETL 4 Connector Channel Verified
- PoE Compliant
- ANSI/TIA-568-C.2, ANSI/TIA-568.2-D, ANSI/TIA-568.2-E, ISO/IEC 2nd Edition 11801 & CENELEC EN50173
- IEC 61156-6 for patch cable
- Flammability Test - IEC 60332-1-2
- Acid Gas Test Method - IEC 60754-1 (only for LSZH Jacket)
- Smoke Density Test - ASTM D2843 (only for LSZH Jacket)
- Minimum concentration of oxygen - ASTM D2863 (only for LSZH Jacket)

Environmental Specification

Operating temperature	-10°C to +60°C
Storage Temperature	-20°C to +70°C
Installation Temperature	0°C to +50°C

Ordering Information

Part Number	Product Description
GC6PCUTLZWH001	Genius Patch Cord Cat 6 UTP LSZH 1 Meter White
GC6PCUTLZWH002	Genius Patch Cord Cat 6 UTP LSZH 2 Meter White
GC6PCUTLZWH003	Genius Patch Cord Cat 6 UTP LSZH 3 Meter White
GC6PCUTLZBL001	Genius Patch Cord Cat 6 UTP LSZH 1 Meter Blue
GC6PCUTLZBL002	Genius Patch Cord Cat 6 UTP LSZH 2 Meter Blue
GC6PCUTLZBL003	Genius Patch Cord Cat 6 UTP LSZH 3 Meter Blue
GC6PCUTFRWH001	Genius Patch Cord Cat 6 UTP FR PVC 1 Meter White
GC6PCUTFRWH002	Genius Patch Cord Cat 6 UTP FR PVC 2 Meter White
GC6PCUTFRWH003	Genius Patch Cord Cat 6 UTP FR PVC 3 Meter White
GC6PCUTFRBL001	Genius Patch Cord Cat 6 UTP FR PVC 1 Meter Blue
GC6PCUTFRBL002	Genius Patch Cord Cat 6 UTP FR PVC 2 Meter Blue
GC6PCUTFRBL003	Genius Patch Cord Cat 6 UTP FR PVC 3 Meter Blue

Note –

- The last three digits specify the patch cord length; “001” denotes 1 meter – Example -002 is 2mtr, 005 is 5 mtr
- The last three digits specify the patch cord length; “105” Starting 1 denotes decimal length 105 is 0.5Mtr, 125 Is 2.5 mtr
- Color Coding: WH – White; RD – Red; BL – Blue.

