

Copper Patch Cord

CAT 6A - UTP



Genius UTP Cat 6A Patch Cords support Gigabit Ethernet and 10 Gbps applications with low insertion loss and reduced crosstalk. Built with flexible cable and TIA-compliant RJ45 terminations, they are available in various colors and lengths.

The Genius RJ45 plug provides strong cable retention, prevents pair deformation, and ensures precise wire alignment for reliable, high-performance connectivity.

Key Features

- Injection moulded 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 Compliant
- Flame Retardant verified according to IEC 60332-1-2 & UL 1581 VW-1
- 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 - Shape separator
Cross Filler Material	HDPE
Sheath Material	LSZH
Sheath thickness	0.55 mm+/-0.05mm
Tensile Strength (For Sheath)	Min. 0.917 Kgf/mm ²
Cable Diameter	6.0±0.3 mm
RJ45 Plug Housing Material	Polycarbonate, UL94V-1
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	500 MHz
Characteristic Impedance	100 Ω ±15 Ω
DC Resistance	≤ 9.38 Ω / 100 m
Conductor Resistance	Max.14.2 Ω/100 m
Resistance unbalance	2% max
Mutual Capacitance	43 pF/m nominal at 1 KHz
Capacitance unbalance	1500 pF/km max. at 1 KHz
Max propagation delays	5.3 ns/m max @ 100 MHz
Cable Skew	≤ 45 ns / 100 m
NVP	69% nominal
Max operating Voltage	30 VAC / 56 VDC
Insulation Resistance	500 MΩ minimum
Dielectric Withstand	1000 volts RMS, 1 min. (60 Hz)

Environmental Specification

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

Standards, Certifications & Compliances

- UL Listed & RoHS v3 Compliant
- Compliance with UL 94
- PoE Type IEEE 802.3an
- ANSI/TIA-568-C.2, ANSI/TIA-568.2-D, ANSI/TIA-568.2-E, ISO/IEC 2nd Edition 11801 & CENELEC EN50173
- Compliance with IEC 61156-6 for patch cable
- Flammability Test - IEC 60332-1-2 & IEC 332-1 / UL 1581 VW-1
- Acid Gas Test Method - IEC 60754-1 & Smoke Density Test - ASTM D2843
- Minimum concentration of oxygen - ASTM D2863

Ordering Information

Part Number	Product Description
GCTPCUTLZWH001	Genuis Patch Cord Cat 6A UTP LSZH 1mtr White
GCTPCUTLZWH002	Genuis Patch Cord Cat 6A UTP LSZH 2mtr White
GCTPCUTLZWH003	Genuis Patch Cord Cat 6A UTP LSZH 3mtr White
GCTPCUTLZBL001	Genuis Patch Cord Cat 6A UTP LSZH 1mtr Blue
GCTPCUTLZBL002	Genuis Patch Cord Cat 6A UTP LSZH 2mtr Blue
GCTPCUTLZBL003	Genuis Patch Cord Cat 6A UTP LSZH 3mtr Blue
GCTPCUTLZRD001	Genuis Patch Cord Cat 6A UTP LSZH 1mtr Red
GCTPCUTLZRD002	Genuis Patch Cord Cat 6A UTP LSZH 2mtr Red
GCTPCUTLZRD003	Genuis Patch Cord Cat 6A UTP LSZH 3mtr Red

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.