

## Cat 6 UTP Patch Cords



#### **Features**

- · Patch Cords are used in the work area and cross-connect generic cabling applications
- Comprise a length of eight-wire flexible patch cable, terminated with snagless high quality, two eight-position
  RJ-45 plugs at each end
- Patch cords feature molded RJ-45 connectors for enhanced life and reliability
- Extra long boot to maintain the bend radius
- Conforms to the ANSI/TIA/EIA-568-C.2, ISO/IEC 2nd edition 11801 Class E and CENELEC EN50173 for Category 6/Class E.
- Exceeds the Category 6 standards for NEXT and FEXT de-embedded requirements
- · Ultra slim design for high density environments
- Latch protection in order to eliminate digging in high density patch cord installations
- 100% tested at the factory
- Plugs with 50 micron gold plating contacts
- · Backward Compatible and Interoperable
- · Horizontal Distribution & Backbone Cabling

#### Description

Genuis UTP Patch Cord conforms to ANSI/TIA/EIA-568-C.2, ISO/IEC 11801 2nd edition and CENELEC EN50173 for Category 6/Class E. It has been tested up to 600 MHz, and is designed for high speed protocols such as ATM 622 Mbps and Gigabit Ethernet 1000 Mbps applications. Comprised of flexible patch cable and terminating with two modular plugs. Wiring scheme according to T568A/B-T568A/B.

#### Cat 6 UTP Patch Cable

Genius UTP Patch Cable is a 100 ohm cable, with four twisted pairs for indoor installations.

#### Cat 6 Modular Plug

Genuis Plug is field-terminatable, with superior cable retention providing enhanced pull-strength and preventing pair deformation. The plug is designed to ensure precision wire placement, providing superior performance.

The connectors have 8 contacts, and accommodate termination of 24 AWG and 26 AWG solid and stranded conductors



# **Cat 6 UTP Patch Cords**

#### Standards Reference

- All Proposed Category 6 Requirements as Per ANSI/TIA/, ISO/IEC, and CENELEC EN Standards:
- ANSI/TIA/EIA 568-C.2 CAT6
- ISO/IEC 2nd Edition 11801 Class E
- UL 94 V-0 Compliant
- IEC 61156-6 for patch cable
- IEC60332-1, IEC61034-2, IEC60754-1&-2 and IEC 60603-7 (603-7) Compliant
- Flame Retardant verified according to IEC 60332-1-2
- RoHS Compliant

### **Applications**

- 10GBASE-T ETHERNET (IEEE P802.3an) Proposed100 Mbps TP-PMD
- 1000BASE-TX Fast Ethernet1000BASE-T Gigabit Ethernet
- 100BASE-TX Fast Ethernet.10BASE-T Ethernet.
- 155/622 Mbps ATM4/16 Mbps Token Ring
- 100VG-AnyLAN1.2Gb/s ATM

#### **Construction**

Conductor	Material / Size	Bare Copper / 24AWG
	Construction	7/0.19± 0.01mm
Insulation	Material	Solid PE
	Thickness	Nominal: 0.2±0.02 mm
	Diameter	Nominal: 0.8 ± 0.03 mm
	Colour	Blue/White-Blue Orange/White-Orange
		Green/White-Green Brown/White-Brown
	Elongation	Min. 400%
	Tensile Strength	Min. 1.6Kgf/mm²
	Pair Construction	Four pairs cabled together, over a precision cross-shaped pair organizer
Cross Member	Material	PE 4.0*0.5MM
Ripcord	Material	1670D or as per requirement
Sheath	Material	PVC / LSZH
	Thickness	Nominal: 0.5 mm+-0.05mm
	Diameter	6.0±0.3 mm
	Tensile Strength	Min. 0.917Kgf/mm²



# **Cat 6 UTP Patch Cords**

#### **Electrical Performances**

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Dielectric Strength of Insulation	1500 V dc / 2 seconds
DC Resistance	Max. 96 Ohm/km max. at 20°C
Insulation Resistance Test	Min. 5000MΩ.Km
Conductor Resistance	Max.14.5Ω/100m at 20°C
Resistance Unbalance	Max. 2%
Capacitance Unbalance	Max. 330 pF/100m
Mutual Capacitance	Max. 5600 pF/100m
Maximum operating voltage	300V
Impedance	100±15 Ohm at 1 to 100 MHz
Impedance	100±(15 + 0.05(f-100)) W at f=100 to 250 MHz
Velocity of Propagation	69% nominal
	5.7 ns/m max @ 1 MHz
Propagation Delay	5.4 ns/m max @ 10 MHz
	5.3 ns/m max @ 100 MHz
Propagation Delay Skew	45 ns/100 m max @ 1-250 MHz

## **Ordering Information**

GC6PCUTLZWH001	Genius Patch Cord Cat 6 UTP LSZH 1mtr White
GC6PCUTLZWH002	Genius Patch Cord Cat 6 UTP LSZH 2mtr White
GC6PCUTLZWH003	Genius Patch Cord Cat 6 UTP LSZH 3mtr White
GC6PCUTLZBL001	Genius Patch Cord Cat 6 UTP LSZH 1mtr Blue
GC6PCUTLZBL002	Genius Patch Cord Cat 6 UTP LSZH 2mtr Blue
GC6PCUTLZBL003	Genius Patch Cord Cat 6 UTP LSZH 3mtr Blue
GC6PCUTFRWH001	Genius Patch Cord Cat 6 UTP FR-PVC 1mtr White
GC6PCUTFRWH002	Genius Patch Cord Cat 6 UTP FR-PVC 2mtr White
GC6PCUTFRWH003	Genius Patch Cord Cat 6 UTP FR-PVC 3mtr White
GC6PCUTFRBL001	Genius Patch Cord Cat 6 UTP FR-PVC 1mtr Blue
GC6PCUTFRBL002	Genius Patch Cord Cat 6 UTP FR-PVC 2mtr Blue
GC6PCUTFRBL003	Genius Patch Cord Cat 6 UTP FR-PVC 3mtr Blue