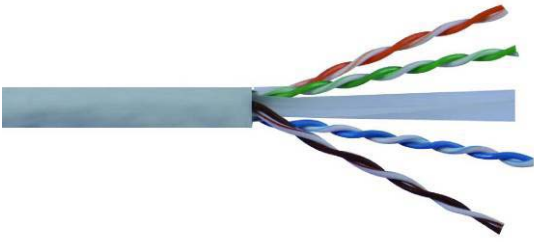


# CATEGORY 6 U/UTP PATCH CABLE 4 PAIR



Maxxim Category 6 U/UTP cables are designed to meet the most advanced U/UTP cable applications. Tested to 250 MHz, the guaranteed performance of this cable meets the ANSI/TIA 568C.2 and ISO/IEC 11801 requirements for PS-NEXT, attenuation, return loss, attenuation-to-crosstalk ratio (ACR) and impedance, making it ideal for high-end transmission links supporting today's networking protocols.

## CONSTRUCTION

24AWG bare copper wire insulated with polyethylene. Two insulated conductors twisted together to form a pair and four such pairs cabled to form the basic unit jacketed with flame-retardant PVC.

## STANDARDS

North American    ANSI/TIA 568C.2  
International      ISO/IEC 11801

## FLAME RATING

UL 444 CM, CMR

## APPLICATIONS

Category 6 U/UTP cable is intended for high speed data applications including:

IEEE 802.3 1000BASE-T, 10BASE-T, 155 Mb/s ATM, 4/16 Mb/s Token Ring

## FEATURES

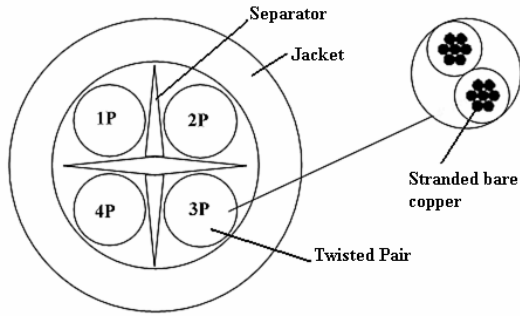
- Specified and tested to 250 MHz
- Small, round design pairs
- ETL verified to ANSI/TIA 568C.2 and ISO/IEC 11801

## BENEFITS

- Reliably supports today's network protocols
- Reduced installation costs and maintenance
- Lower Bit Error Rates, increases network efficiency and uptime



# CATEGORY 6 U/UTP PATCH CABLE 4 PAIR



## Construction

Twisted Pairs Color Code:

1. PAIR 1: Blue, White/Blue
2. PAIR 2: Orange, White/Orange
3. PAIR 3: Green; White/Green
4. PAIR 4: Brown; White/Brown

## Component

1. Conductor: AWG 24
2. Insulators: HDPE (Min. Thickness 0.153, Min. Avg. thickness 0.178)
3. Insulators Diameter: 0.93~0.98mm
4. Jacket: 75°C PVC (Min. Thickness 0.58, Min. Avg. thickness 0.46)
5. Jacket Diameter: 6.0 ± 0.2mm

## Marking

U/UTP PACH CABLE 24AWG 4PR CM 75°C (UL) E178558 ETL  
 Verified rated ANSI/TIA 568C.2 CAT.6

## Physical Characters

Un-aged:

1. Tensile strength: Polyolefin 2400PSI, Jacket (PVC) 2000PSI
2. Elongation: Polyolefin 300% min. Jacket (PVC) 100% min

After Aging:

1. Tensile strength: Polyolefin 75%min. Jacket (PVC) 85% min
2. Elongation: Polyolefin 75%min. Jacket (PVC) 50% min

## Electric Characters

1. Voltage rating: 300V
2. Temperature rating: 75°C
3. Dielectric strength: DC 2.5 KV / 2sec. or AC1.75 KV / 2sec.
4. Mutual Capacitance: 5.6 nF/100M nom.
5. Pair to ground : 330pF/100m max
6. Conductor DC resistance: 87.6 Ohms/km max. at 20°C.
7. DC Resistance Unbalance: 5% max.
8. Characteristic Impedance: 100±15 Ohms 1~250MHz
9. Propagation Delay skew: 45ns/100m max. 1~250MHz
10. Velocity of Propagation: 70%

| FREQ<br>MHz | Attenuation<br>(max. dB/100m) | NEXT<br>(min. dB) | RL<br>(min. dB at 20°C) | PSNEXT<br>(min. dB) | ELFEXT<br>(min. dB) | PSELFEXT<br>(min. dB) | DELAY<br>(max. ns at 20°C) |
|-------------|-------------------------------|-------------------|-------------------------|---------------------|---------------------|-----------------------|----------------------------|
| 1           | 2.4                           | 74.3              | 20.0                    | 72.3                | 67.8                | 64.8                  | 570.0                      |
| 4           | 4.5                           | 65.3              | 23.0                    | 63.3                | 55.8                | 52.8                  | 552.0                      |
| 8           | 6.4                           | 60.8              | 24.5                    | 58.8                | 49.7                | 46.7                  | 546.7                      |
| 10          | 7.1                           | 59.3              | 25.0                    | 57.3                | 47.8                | 44.8                  | 545.0                      |
| 16          | 9.1                           | 46.2              | 25.0                    | 54.2                | 43.7                | 40.7                  | 543.0                      |
| 20          | 10.2                          | 54.8              | 25.0                    | 52.8                | 41.8                | 38.8                  | 542.0                      |
| 25          | 11.4                          | 53.3              | 24.2                    | 51.3                | 39.8                | 36.8                  | 541.2                      |
| 31.25       | 12.8                          | 51.9              | 23.3                    | 49.9                | 37.9                | 34.9                  | 540.4                      |
| 62.50       | 18.5                          | 47.4              | 20.7                    | 45.4                | 31.9                | 28.9                  | 538.6                      |
| 100         | 23.8                          | 44.3              | 19.0                    | 42.3                | 27.8                | 24.8                  | 538.0                      |
| 200         | 34.8                          | 39.8              | 16.4                    | 37.8                | 21.8                | 18.8                  | 536.5                      |
| 250         | 39.4                          | 38.3              | 15.6                    | 36.3                | 19.8                | 16.8                  | 536.0                      |