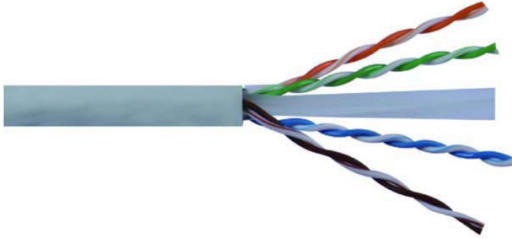
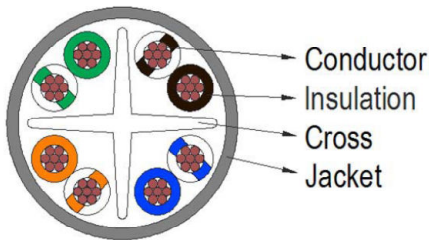




## CATEGORY 6 U/UTP PATCH CABLE 4 PAIR (AWG 24)



Wave Cables Cat. 6 U/UTP cables are designed to meet the most advanced U/UTP cable applications. Tested to 250MHz, the performance of this cable meets the 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

Twisted Pairs Color Code:

PAIR 1: Blue, White/Blue

PAIR 2: Orange, White/Orange

PAIR 3: Green; White/Green

PAIR 4: Brown; White/Brown

### Component

Conductor: AWG 24,  $7 \times 0.192 \pm 0.005$ mm

Insulators: HDPE (Min. Thickness 0.153, Min. Avg. thickness 0.178)

Insulators Diameter:  $0.98 \pm 0.01$ mm

Jacket: 75°C PVC (Min. Thickness 0.58, Min. Avg. thickness 0.51)

Jacket Diameter:  $5.8 \pm 0.2$ mm

### Marking

Wave Cables U/UTP STRANDED CABLE 24AWG 4PR CAT.6

### Physical Characteristics

Un-aged:

Tensile strength: Polyolefin 2400PSI, Jacket (PVC) 2000PSI

Elongation: Polyolefin 300% min. Jacket (PVC) 100% min

After Aging:

Tensile strength: Polyolefin 75%min. Jacket (PVC) 85% min

Elongation: Polyolefin 75%min. Jacket (PVC) 50% min

### 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. Plastic cross in the middle separates pairs from each other.

### 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

### BENEFITS

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

### Electric Characteristics

Voltage rating: 300V

Temperature rating: 75°C

Dielectric strength: DC 2.5 KV / 2sec. or AC1.75 KV / 2sec.

Mutual Capacitance: 5.6 nF/100m nom.

Pair to ground : 330pF/100m max

Conductor DC resistance: 89 Ohms/km max. at 20°C.

DC Resistance Unbalance: 5% max.

Characteristic Impedance:  $100 \pm 15$  Ohms 1~100MHz

Propagation Delay skew: 45ns/100m max.

Velocity of Propagation: 70%



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**Transmission Characteristics**

FREQ	Attenuation	RL	NEXT	PS-NEXT	ELFEXT	PS-ELFEXT	Prop. DELAY
MHz	max. dB/100m	min. dB at 20°C	min. dB	min. dB	min. dB	min. dB	max. ns at 20°C
1	2.4	20.0	74.3	72.3	67.8	64.8	570
4	4.5	23.0	65.3	63.3	55.8	52.8	552
8	6.4	24.5	60.8	58.8	49.7	46.7	547
10	7.1	25.0	59.3	57.3	47.8	44.8	545
16	9.1	25.0	56.2	54.2	43.7	40.7	543
20	10.2	25.0	54.8	52.8	41.8	38.8	542
25	11.4	24.2	53.3	51.3	39.8	36.8	541
31.25	12.8	23.3	51.9	49.9	37.9	34.9	540
62.50	18.5	20.7	47.4	45.4	31.9	28.9	539
100	23.8	19.0	44.3	42.3	27.8	24.8	538
200	34.8	16.4	39.8	37.8	21.8	18.8	537
250	39.4	15.6	38.3	36.3	19.8	16.8	536