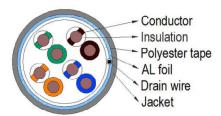


CATEGORY 5E F/UTP SCREENED SOLID CABLE 4 PAIR (AWG 24)



Wave Cables 5E F/UTP cables are designed to meet the most advanced U/UTP cable applications. Tested to 100MHz, 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 todays 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

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

0.178)

Insulators Diameter: 0.88 ± 0.01 mm Foil screen: Aluminium/PET, 50/15 μ m Drain wire: Tin Plated Copper, 0.43mm

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

Jacket Diameter: 5.1 ± 0.2 mm

Marking

Wave Cables F/UTP SOLID SCREENED CABLE 24AWG 4PR CAT.5E

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. Shield consist of a thin layer of aluminium and polyester tape. Additional drain wire is used to terminate and ground the shield.

APPLICATIONS

Category 5E F/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 100 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
- Screen is reflecting energy and is picking up noise and conduct it to the ground

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±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 | 2.0 | 20.0 | 65.3 | 62.3 | 64.0 | 61.0 | 570 |
| 4 | 4.1 | 23.0 | 56.3 | 53.3 | 52.0 | 49.0 | 552 |
| 8 | 5.8 | 24.5 | 51.8 | 48.8 | 45.9 | 42.9 | 547 |
| 10 | 6.5 | 25.0 | 50.3 | 47.3 | 44.0 | 41.0 | 545 |
| 16 | 8.2 | 25.0 | 47.2 | 44.4 | 39.9 | 36.9 | 543 |
| 20 | 9.3 | 25.0 | 45.8 | 42.8 | 38.0 | 35.0 | 542 |
| 25 | 10.4 | 24.3 | 44.3 | 41.3 | 36.0 | 33.0 | 541 |
| 31.25 | 11.7 | 23.6 | 42.9 | 39.9 | 34.1 | 31.1 | 540 |
| 62.50 | 17.0 | 21.5 | 38.4 | 35.4 | 28.1 | 25.1 | 539 |
| 100 | 22.0 | 20.1 | 35.3 | 32.3 | 24.0 | 21.0 | 538 |
| 200 | - | - | - | - | - | | - |
| 250 | - | - | - | - | - | | - |