

CATEGORY 5E F/UTP SCREENED PATCH CABLE 4 PAIR (AWG 26)



Wave Cables 5E F/UTP cables are designed to meet the most advanced F/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 26, 7x0.152mm

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

0.178)

 $\label{eq:continuous} Insulators \ Diameter: 0.83 \pm 0.01 mm \\ Foil screen: \ Aluminium/PET, 25/25 \mu m \\ Drain \ wire: \ Tin \ Plated \ Copper, 7x0.152 mm \\ \end{array}$

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

Jacket Diameter: 5.0 ± 0.2mm

Marking

Wave Cables F/UTP STRANDED SCREENED CABLE 26AWG 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

26AWG 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 $% \left(1\right) =\left(1\right) \left(1\right$

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	3.2	20.0	65.3	62.3	64.0	61.0	570
4	6.0	23.0	56.3	53.3	52.0	49.0	552
8	8.5	24.5	51.8	48.8	45.9	42.9	547
10	9.5	25.0	50.3	47.3	44.0	41.0	545
16	12.1	25.0	47.2	44.2	39.9	36.9	543
20	13.5	25.0	45.8	42.8	38.0	35.0	542
25	15.2	24.2	44.3	41.3	36.0	33.0	541
31.25	17.1	23.3	42.9	39.9	34.1	31.1	540
62.50	24.8	20.7	38.4	35.4	28.1	25.1	539
100	32.0	19.0	35.3	32.3	24.0	21.0	538
200	-	-	-	-	-		-
250	-	-	-	-	-		-