

TrueNet™ Category 5e (C5eT)



HIGHWIRE SILVER HIGH PERFORMANCE UTP COPPER TWISTED PAIR CABLE

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Description : 4 Pair Unshielded Twisted Pair (UTP) Category 5e specifications with TrueNet technology
Part Number : TN5ETR-BLRB
Packaging : Reel-in-a-Box
Standard Length : 305m per Box
Application : This C5eT cable is tested for Power Sum NEXT, ELFEXT, Delay Skew, Propagation Delay and any other criteria as specified in the emerging standard.
 This C5eT cable is based upon a patent-pending technology called TrueMatch™. This product design and manufacturing innovation fine-tunes each cable pair to achieve an operating impedance of 100±3 ohms. Applications can include Voice, ISDN, 10Base-T (IEEE802.3), Broadband & Baseband Video, ATM155 and 622 Mbps, 100Mbps TPDDI, 100VG-AnyLAN (IEEE 802.12), Fast and Gigabit Ethernet.

Cable Data

Conductor:	4 Twisted Pairs of 24AWG (or better) Solid bare copper wire c/w rip Cord	Operating Environment: Indoor Operating Temperature: -20 +60°C
Insulation:	100% FEP	Core Colors (nom. OD: 0.52mm)
Flame Rating:	UL (CM), CMR/MPR optional	Pair 1: Blue - White/Blue
Sheath:	Flame Retardant PVC	Pair 2: Orange - White/Orange
Color Coding:	Tight Lay System	Pair 3: Green - White/Green
		Pair 4: Brown - White/Brown

Electrical Performance

Standards:	EIA/TIA 568-A, ISO/IEC 11801 NEC 800 Type CMP, EN50173, UL	Volocity of propagation: 73%
Differential Characteristic Impedance*:	5 Ohms	Propagation Delay: 501ns/100m
		Delay Skew: 25ns/100m
		Operating Voltage (Max): 300 VDC
Insulation Resistance (Min):	500 Megohms/1000 ft.	DC Resistance: 28.6 ohms/1000 ft.
		Mutual Capacitance: 14pF/ft

Typical Cable Performance*

FREQUENCY (MHz)	IMPEDANCE Ohms	ATTENUATION (dB)	RETURN LOSS (dB)	ATTENUATION-TO-NEXT RATIO		NEXT		ELFEXT	
				Pair-To-Pair dB/100m	PowerSum dB/100m	Pair-To-Pair dB/100m	PowerSum dB/100m	Pair-To-Pair dB/100m	PowerSum dB/100m
16	100±5	7.5	44.5	60.4	53.1	67.8	60.6	60.8	53.5
31.25	100±4	10.5	43.5	53.1	45.5	63.6	56.1	55	48.2
62.5	100±3	15.1	41.4	43.6	36.8	58.6	51.9	48.9	42
100	100±3	19.5	42.1	36	29.9	55.5	49.5	45.2	38.7
200	100±3	27.8	39.6	22.2	15.8	49.9	43.6	38.2	31.5
250	100±3	31.5	38.6	17.1	10.5	48.5	42.1	35	28.6
300	100±3	34.8	40	13.4	6.5	48.2	41.4	32.4	26.2
350	100±3	37.6	37.5	8.8	2.3	46.4	39.9	29.6	22.6

* For sample measurement