LAN CABLES

LAN Cables

UNSHIELDED TWISTED PAIR (UTP) CAT 5 - 100 MHz LAN CABLES

ZENIUM LAN CABLES : UTP CAT 5 meet the performance requirement of TIA/EIA 568 C.2 and are most suitable for voice, data, video, low voltage control and all LAN topologies including Horizontal and Vertical distribution Plenum and Riser.

Application : This Category 5, four pair cable is a high speed, high performance, 100 ohm impedance cable capable of carrying high bit-rate signalling for extended distance in horizontal cabling. Signal amplifiers are not required for a length of 328 feet (100M). Applications can include Voice, ISDN, ATM 155 Mbps, ATM 622 Mbps, 1000 Mbps TPDDI, Fast and Giga Ethernet, 100 Mbps TP-PMD, 1000 BASE-T.

TECHNICAL DATA-PHYSICAL

Conductor : 24 AWG Bare Solid Copper

Nom. Dia of Conductor : 0.5 mm.

Insulation : High density Polyethylene

Core Colour :
Pair 1 : White Blue
Pair 2 : White Orange
Pair 3 : White Green
Pair 4 : White Brown

Outer Sheath : Fire Retardant (FR)PVC

Nom. Overall Dia.: 5.4 mm

Sheath Colour : Grey

packaging length : 305 Mtrs. (1000 Feet)

TECHNICAL DATA-ELECTRICAL

Impedance : 100+/- 15 Ohm.

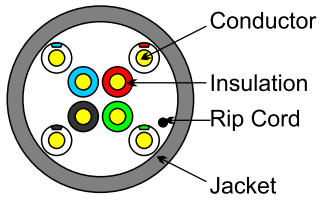
(NVP) Velocity of Propagation : 65% min

Delay Skew : 45 ns/100 Mtrs. at 20°C Max.

Propagation Delay : 538 ns / 100 Mtrs @ 1000 MHZ @20 deg. C max

DC Resistance : 92 ohm/km @20 deg. C Max

Mutual Capacitance : 56 nf /Km. Max



Comparative Technical Performance

Frequency	Max. Attenuation @ 20°C	Min Return Loss	Min NEXT	Min PS NEXT	Min PS ELFEXT	Min ACR
MHz	dB/100 mtrs	dB	dB	dB	dB	dB
1	2	20	65.3	62.3	60.8	63.3
4	4.1	23	56.3	53.3	48.8	52.2
8	5.8	24.5	51.8	48.8	42.7	46
10	6.5	25	50.3	47.3	40.8	43.8
16	8.2	25	47.2	44.4	36.7	39
20	9.3	25	45.8	42.8	34.8	36.5
25	10.4	24.3	44.3	41.3	32.8	33.9
31.25	11.7	23.6	42.9	39.9	30.9	31.2
62.5	17	21.5	38.4	35.4	24.9	21.4
100	22	20.1	35.3	32.3	20.8	13.3

The above data is approximate and subject to manufacturing tolerance

ZENIUM®

LAN Cables

UNSHIELDED TWISTED PAIR (UTP) CAT 5E - 250 MHz LAN CABLES

ZENIUM LAN CABLES : UTP CAT 5E meet the performance requirement of TIA/EIA 568 C.2 and are most suitable for voice, data, video, low voltage control and all LAN topologies including Horizontal and Vertical distribution Plenum and Riser.

Application : This Category 5E, four pair cable is a high speed, high performance, 100 ohm impedance cable capable of carrying high bit-rate signalling for extended distance in horizontal cabling. Signal amplifiers are not required for a length of 328 feet (100M). Applications can include Voice, ISDN, ATM 155 Mbps, ATM 622 Mbps, 1000 Mbps TPDDI, Fast and Giga Ethernet, IEEE802.3/5/12, 100BASE VG (100 BASE NE), 100 BASE-T,100 Mbps TP-PMD, 1000 BASE-T, 10GB and any other future applications designed for category 6 Cables.

TECHNICAL DATA-PHYSICAL

Conductor : 24 AWG Bare Solid Copper

Nom. Dia of Conductor : 0.574 mm.

Insulation : High density Polyethylene

Core Colour :
Pair 1 : White Blue
Pair 2 : White Orange
Pair 3 : White Green
Pair 4 : White Brown

Outer Sheath : Fire Retardant (FR)PVC

Nom. Overall Dia.: 6.3 mm

Sheath Colour : Grey

packaging length : 305 Mtrs. (1000 Feet)

TECHNICAL DATA-ELECTRICAL

Impedance : 100+/- 15 Ohm.

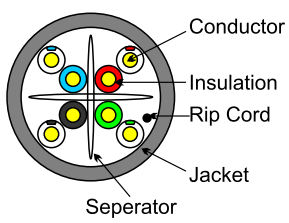
(NVP) Velocity of Propagation : 65% min

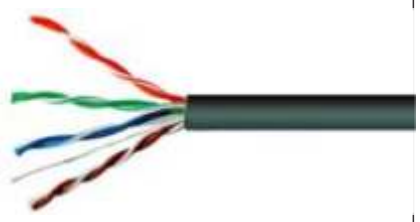
Delay Skew : 45 ns/100 Mtrs. at 20°C Max.

Propagation Delay : 537 ns / 100 Mtrs @ 1000 MHZ @20 deg. C max

DC Resistance : 92 ohm/Km @20 deg. C Max

Mutual Capacitance : 56 nf / Km. Max





Comparative Technical Performance

Frequency	Max. Attenuation @ 20°C	Min Return Loss	Min NEXT	Min PS NEXT	Min PS ELFEXT	Min ACR
MHZ	dB/100mtrs	dB	dB	dB	dB	dB
1	2	20	74.3	72.3	64.8	72.6
4	3.8	23	65.3	63.3	52.8	61.5
8	5.3	24.5	60.8	58.8	46.7	55.5
10	6	25	59.3	57.3	44.8	53.3
16	7.6	25	56.2	54.2	40.7	48.6
20	8.5	25	54.8	52.8	38.8	46.3
25	9.5	24.3	53.3	41.3	36.8	43.8
31.25	10.7	23.6	51.9	49.9	34.9	31.2
62.5	15.4	21.5	47.7	45.4	28.9	32.3
100	19.8	20.1	44.3	42.3	24.8	24.5
200	29	18	39.8	37.8	18.8	10.8
250	32.8	17.3	38.3	36.3	16.8	5.5

The above data is approximate and subject to manufacturing tolerance

LAN Cables

UNSHIELDED TWISTED PAIR (UTP) CAT 6 - 500 MHz LAN CABLES

ZENIUM LAN CABLES : UTP CAT 6 meet the performance requirement of TIA/EIA 568 C.2 and are most suitable for voice, data, video, low voltage control and all LAN topologies including Horizontal and Vertical distribution Plenum and Riser.

Application : This Category 6, four pair cable is a high speed, high performance, 100 ohm impedance cable capable of carrying high bit-rate signalling for extended distance in horizontal cabling. Signal amplifiers are not required for a length of 328 feet (100M). Applications can include Voice, ISDN, ATM 155 Mbps, ATM 622 Mbps, 1000 Mbps TPDDI, Fast and Giga Ethernet, IEEE802.3/5/12, 100 BASE VG (100 BASE NE), 100 BASE-T, 100 Mbps TP-PMD, 1000 base-T, 10Gb and any other future applications designed for category 6 Cables.

TECHNICAL DATA-PHYSICAL

Conductor : 23 AWG Bare Solid Copper

Nom. Dia of Conductor : 0.574 mm.

Insulation : High density Polyethylene

Core Colour : Pair 1 : White Blue
Pair 2 : White Orange
Pair 3 : White Green
Pair 4 : White Brown

Outer Sheath : Fire Retardant (FR)PVC

Nom. Overall Dia.: 6.3 mm

Sheath Colour : Grey

packaging length : 305 Mtrs. (1000 Feet)

TECHNICAL DATA-ELECTRICAL

Impedance : 100+/- 15 Ohm.

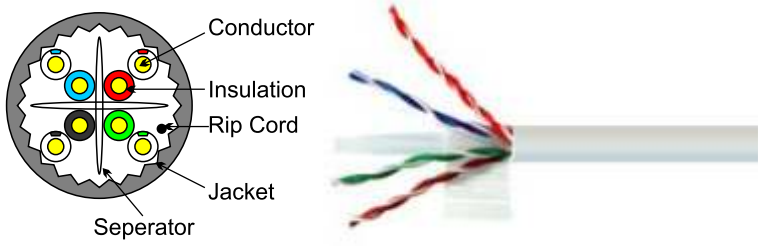
(NVP) Velocity of Propagation : 65% min

Delay Skew : 45 ns/100 Mtrs. at 20^{0}C Max.

Propagation Delay : 537 ns / 100 Mtrs @ 1000 MHZ @20 deg. C max

DC Resistance : 88 ohm/Km @20 deg. C Max.

Mutual Capacitance : 53 nf / Km. Max.



Comparative Technical Performance

Frequency	Max. Attenuation @ 20^{0}C	Min Return Loss	Min NEXT	Min PS NEXT	Min PS ELFEXT	Min ACR
MHZ	dB/100 mtrs	dB	dB	dB	dB	dB
1	2.1	20	74.3	72.3	64.8	67.8
4	3.8	23	65.3	63.3	52.8	55.8
10	5.9	25	59.3	57.3	44.8	47.8
16	7.5	25	56.2	54.2	40.7	43.7
20	8.4	25	54.8	52.8	38.8	41.8
31.25	10.5	23.6	51.9	49.9	34.9	37.9
62.5	15	21.5	47.7	45.4	28.9	31.9
100	19.1	20.1	44.3	42.3	24.8	27.8
200	27.6	18	39.8	37.8	18.8	21.8
250	31.1	17.3	38.3	36.3	16.8	19.8
300	34.3	16.8	37.1	35.1	15.3	18.3
500	45.3	15.2	33.8	31.8	10.8	13.8

The above data is approximate and subject to manufacturing tolerance