

## Copper Structured Cabling

# Category 6A U/UTP LAN Cable



Unshielded Twisted Pair (UTP) Category 6A (CAT6-Augmented) LAN cable is a 23 American Wire Gauge (AWG) used ideally for Gigabit Ethernet, Multimedia, video, voice and data.

Our cables are verified by EC and third party organization and comply with ISO11801. All outer jackets can be PVC or LSZH upon customers' requests.

### Features & Benefits

4 pairs twisted pair cable

Application: Broadband Video, Gigabit Ethernet, Fast Ethernet

All cables meet or exceed the requirement proposed by TIA /EIA 568 B .2 ,ISO/IEC 11801 Category 6A

23AWG insulated copper conducts with PVC jacket

Twisted pairs are brightly coloured and distinguished at a glance

The cross frameworks are stripped to match corresponding colour pairs

Ultra smooth jacket makes this cable easy to pull in tight spaces

### Application

Horizontal wiring in Local Area Networks (LAN)

### Pair1

Blue-Blue/White

### Pair2

Orange-Orange/White

### Pair3

Green-Green/White

### Pair4

Brown-Brown/White

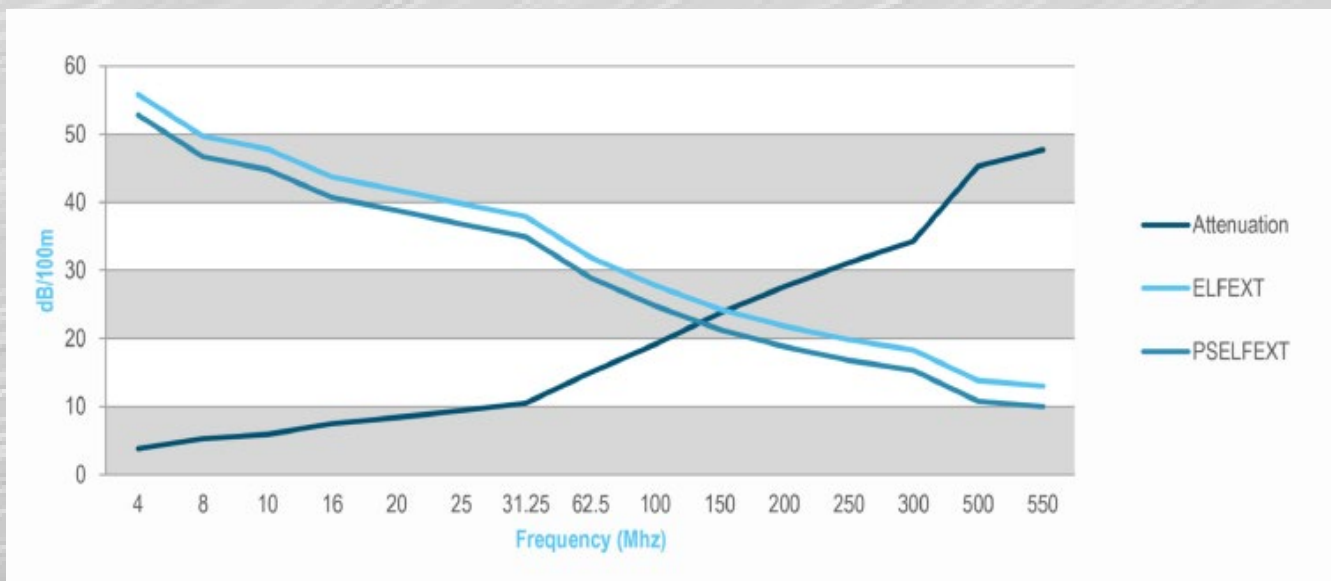
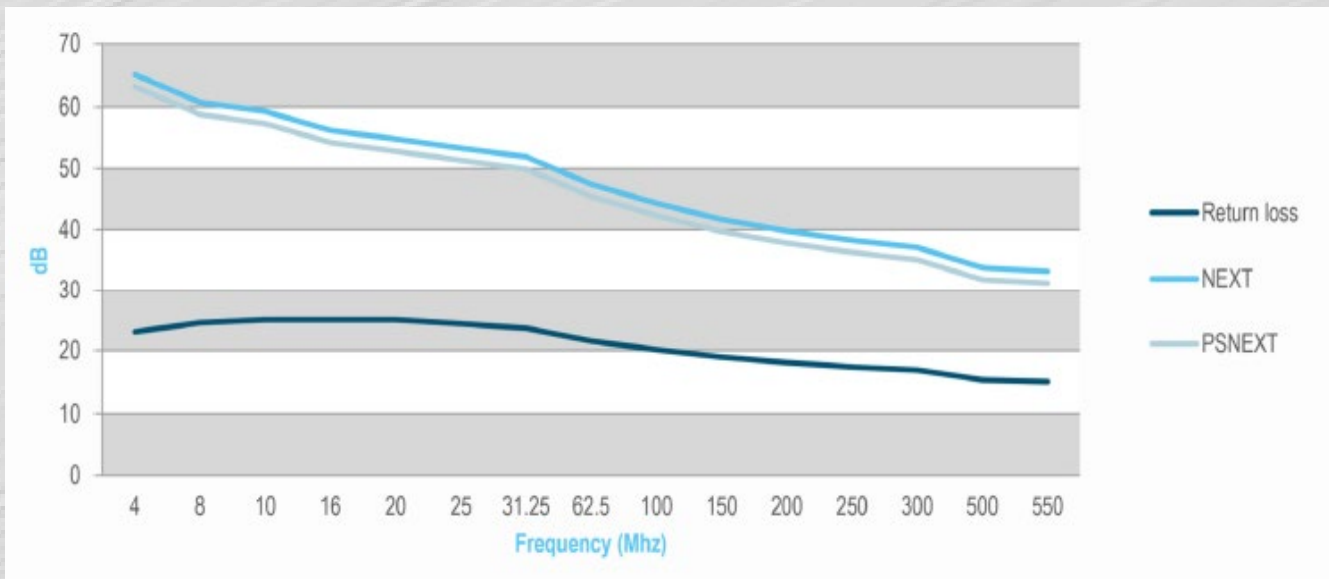
### Construction

Conductor	Solid Bare Copper
American Wire Gauge (AWG)	23
Insulation	HDPE
Average Thickness (±0.03mm)	0.28
Minimum Point Thickness (mm)	0.27
Insulation Diameter (±0.05mm)	1.14
Twisting Lay Length (mm)	≤20
Cable Laying Length (±mm)	140
Filler	PE
Jacket	PVC or LSZH
Average Thickness (±0.05mm)	0.50
Minimum Point Thickness (mm)	0.40
Outer Diameter (±0.2mm)	6.20
Drain Wire	Tinned Copper

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**Electrical Characteristics**



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Frequency (MHz)	Return loss (dB)	Attenuation (dB/100m)	NEXT (dB)
4	23.0	3.8	65.3
8	24.5	5.3	60.8
10	25.0	5.9	59.3
16	25.0	7.5	56.2
20	25.0	8.4	54.8
25	24.3	9.4	53.3
31.25	23.6	10.5	51.9
62.5	21.5	15.0	47.4
100	20.1	19.1	44.3
150	18.9	23.7	41.7
200	18	27.6	39.8
250	17.3	31.1	38.3
300	16.8	34.3	37.1
500	15.2	45.3	33.8
550	14.9	47.7	33.2

Frequency (MHz)	PSNEXT (dB)	ELFEXT (dB/100m)	PSELFEXT (dB/100m)
4	63.3	55.8	52.8
8	58.8	49.7	46.7
10	57.3	47.8	44.8
16	54.2	43.7	40.7
20	52.8	41.8	38.8
25	51.3	39.8	36.8
31.25	49.9	37.9	34.9
62.5	45.4	31.9	28.9
100	42.3	27.8	24.8
150	39.7	24.3	21.3
200	37.8	21.8	18.8
250	36.3	19.8	16.8
300	35.1	18.3	15.3
500	31.8	13.8	10.8
550	31.2	13.0	10.0

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<b>1.0-100.0MHz Impedance (ohms)</b>	100 ± 15
<b>100.0-250MHz Delay Skew (ns/100m)</b>	100 ± 22
<b>1.0-250.0MHz Impedance (ohms)</b>	≤45
<b>Pair-to-Ground Capacitance Unbalance (pF/100m)</b>	≤330
<b>Max. Conductor DC Resistance 20oC (ohms/km)</b>	73.2
<b>Resistance Unbalance (%)</b>	≤5

### Mechanical Characteristics

Test Object	Jacket
Test Material	PVC
Before Tensile Strength (Mpa)	≥13.8
Aging Elongation (%)	≥100
Aging Condition (oC x hrs)	100 x 240
After Tensile Strength (Mpa)	≥85% of unaged
Aging Elongation (%)	≥50% of unaged
Cold Bend (-20±2oCx4hrs)	No crack

### Ordering Information

Construction	Jacket	Category	Length
UTP (U/UTP)	PVC	Category 6a	305m Box
	LSZH		500m Reel

For any queries, please contact Technoline Solutions team using the details below.