

Copper Structured Cabling

Category 5e F/UTP LAN Cable



Application

Horizontal wiring in Local Area Networks (LAN)

Foiled Twisted Pair (FTP) Category 5e (CAT5-Enhanced) copper cable is a 24 American Wire Gauge (AWG) used ideally for Gigabit Ethernet, Multimedia, 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, Fast Ethernet

All cables meet or exceed the requirement proposed by TIA /EIA 568 B .2 ,ISO/IEC 11801 Category 5e

24AWG 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

305 metres packaged in full boxes or 500m reels

| Pair1 | Pair2 | Pair3 | Pair4 |
|-----------------|---------------------|-------------------|-------------------|
| Blue-Blue/White | Orange-Orange/White | Green-Green/White | Brown-Brown/White |

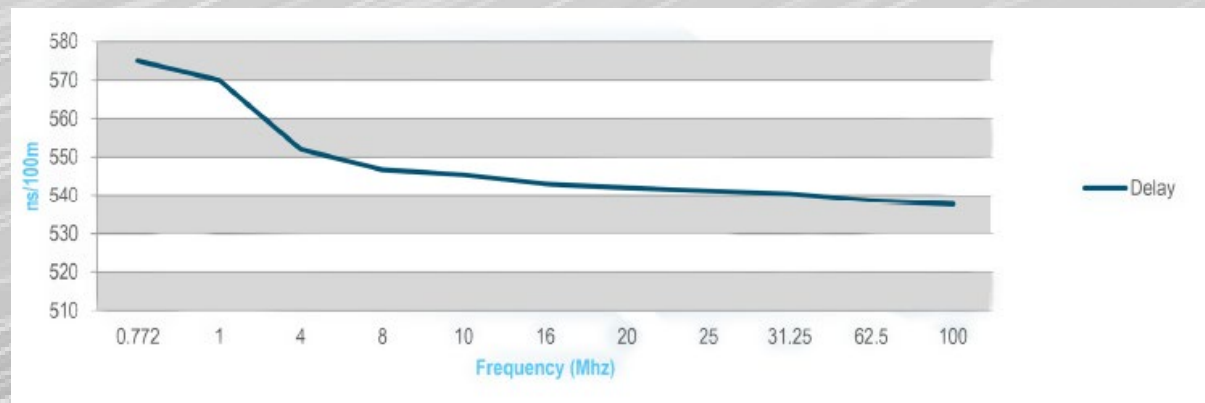
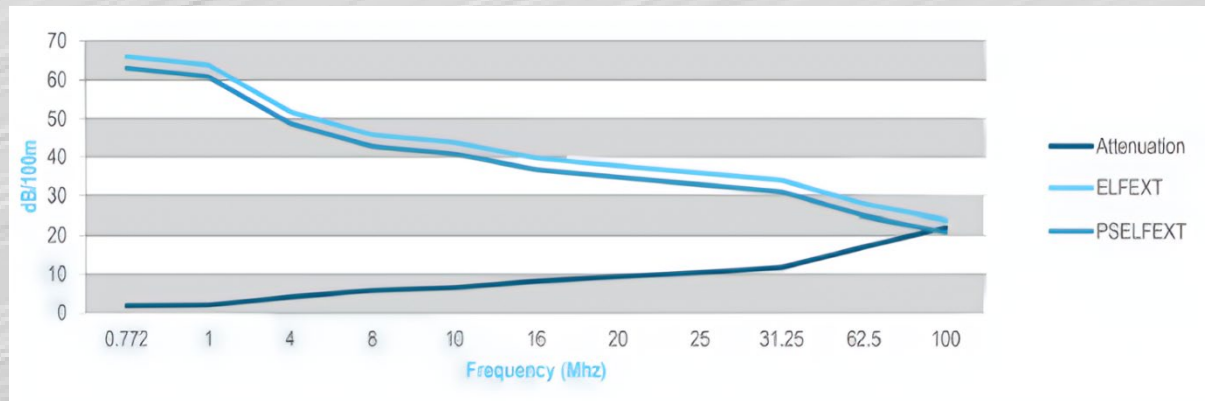
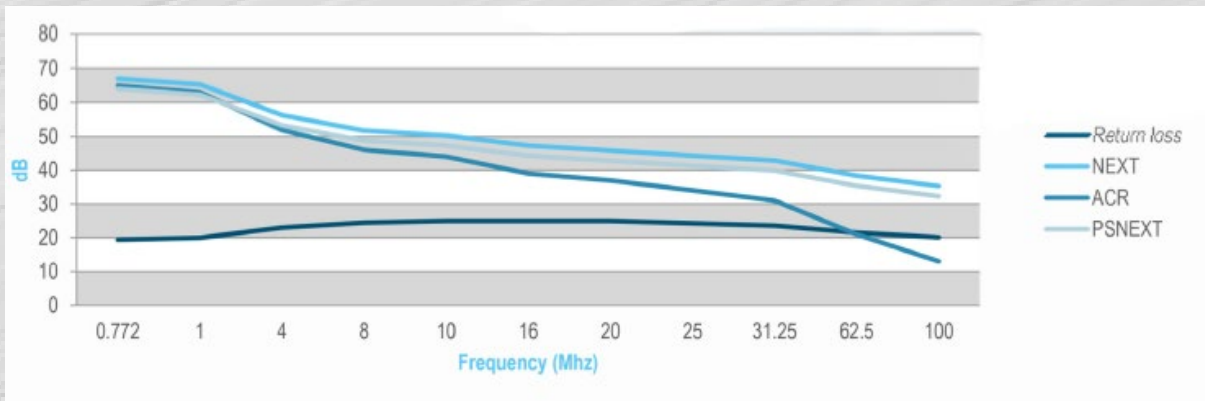
Construction

| | |
|-------------------------------|-------------------|
| Conductor | Solid Bare Copper |
| American Wire Gauge (AWG) | 24 |
| Insulation | HDPE |
| Average Thickness (±0.03mm) | 0.20 |
| Minimum Point Thickness (mm) | 0.18 |
| Insulation Diameter (±0.05mm) | 0.9 |
| Twisting Lay Length (mm) | ≤30 |
| Cable Laying Length (±mm) | 140 |
| Filler | HDPE |
| Jacket | PVC or LSZH |
| Average Thickness (±0.05mm) | 0.50 |
| Minimum Point Thickness (mm) | 0.40 |
| Outer Diameter (±0.2mm) | 5.20 |
| Rip Cord | Per Request |

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Electrical Characteristics



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| Frequency (MHz) | Return loss (dB) | Attenuation (dB/100m) | NEXT (dB) | ACR (dB) |
|--------------------|---------------------|--------------------------|--------------|-------------|
| 0.772 | 19.4 | 1.8 | 67.0 | 65 |
| 1 | 20.0 | 2.0 | 65.3 | 63 |
| 4 | 23.0 | 4.1 | 56.3 | 52 |
| 8 | 24.5 | 5.8 | 51.8 | 46 |
| 10 | 25.0 | 6.5 | 50.3 | 44 |
| 16 | 25.0 | 8.2 | 47.3 | 39 |
| 20 | 25.0 | 9.3 | 45.8 | 37 |
| 25 | 24.3 | 10.4 | 44.3 | 34 |
| 31.25 | 23.6 | 11.7 | 42.9 | 31 |
| 62.5 | 21.5 | 17.0 | 38.4 | 21 |
| 100 | 20.1 | 22.0 | 35.3 | 13 |

| Frequency (MHz) | PSNEXT (dB) | ELFEXT (dB/100m) | PSELFEXT (dB/100m) | Delay (ns/100m) |
|--------------------|----------------|---------------------|-----------------------|--------------------|
| 0.772 | 64.0 | 66.0 | 63.0 | 575.0 |
| 1 | 62.3 | 63.8 | 60.8 | 570.0 |
| 4 | 53.3 | 51.7 | 48.7 | 552.0 |
| 8 | 48.8 | 45.7 | 42.7 | 546.0 |
| 10 | 47.3 | 43.8 | 40.8 | 545.0 |
| 16 | 44.3 | 39.7 | 36.7 | 543.0 |
| 20 | 42.8 | 37.7 | 34.7 | 542.0 |
| 25 | 41.3 | 35.8 | 32.8 | 541.0 |
| 31.25 | 39.9 | 33.9 | 30.9 | 540.0 |
| 62.5 | 35.4 | 27.8 | 24.8 | 538.0 |
| 100 | 32.3 | 23.8 | 20.8 | 537.0 |

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| | |
|---|----------|
| 1.0-100.0MHz Impedance (ohms) | 100 ± 15 |
| 100.0-250MHz Delay Skew (ns/100m) | 100 ± 20 |
| 1.0-250.0MHz Impedance (ohms) | <=45 |
| Pair-to-Ground Capacitance Unbalance (pF/100m) | <=330 |
| Max. Conductor DC Resistance 20oC (ohms/km) | 93.8 |
| Resistance Unbalance (%) | <=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 |
|-----------------|--------|---------------------|-----------|
| FTP (F/UTP) FTP | PVC | Category 5e (CAT5e) | 305m Box |
| | LSZH | | 500m Reel |

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