

CAT 6 LSZH UTP NETWORK CABLE



APPLICATION

A twisted 4 pair high performance cable for data transmission in LAN Networks. Category 6 is recommended for all new installations, supports a frequency range of up to 250MHz and is designed for transmission speeds of up to 1 gigabit per second Ethernet. LSZH sheath for installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

CONSTRUCTION

Conductor: 23 AWG Class 1 solid copper conductor

Insulation: High Density Polyethylene (HDPE)

Sheath: Low Smoke Zero Halogen (LSZH)

CABLE STANDARDS

TIA/EIA-568

ISO/IEC 11801

TIA/EIA 568-C.2

YD/T1019

Pin Assignments

T568A

T568B

CHARACTERISTICS

Temperature Limits: Fixed: -20°C to +50°C

Minimum Bending Radius: As per cable manufacturer datasheet

CORE IDENTIFICATION

Pair 1: **Blue** **Blue/White**

Pair 1: **Orange** **Orange/White**

Pair 1: **Green** **Green/White**

Pair 1: **Brown** **Brown /White**

Sheath: **Violet** or **Black**

CAT 6 LSZH UTP NETWORK CABLE- DIMENSIONS

| CCCL CODE | NUMBER OF CONDUCTORS | NUMBER OF PAIRS | AWG STRANDING | WEIGHT (KG/305M BOX) | OVERALL DIAMETER (MM) |
|-------------|----------------------|-----------------|---------------|----------------------|-----------------------|
| 4UTPCAT6LSF | 8 | 4 | AWG 23 | 16 | 6.1 |

CAT 6 LSZH UTP NETWORK CABLE – SIGNAL PERFORMANCE

| FREQUENCY MHZ | ATTENUATION DB/100M | NEXT DB | PS-NEXT DB | RL DB | ELFEXT DB | PS-ELFEXT DB/100M | PHASE DELAY NS |
|---------------|---------------------|---------|------------|-------|-----------|-------------------|----------------|
| 1 | 2.03 | 74.3 | 72.3 | 20 | 67.8 | 64.8 | 570 |
| 4 | 3.78 | 65.3 | 63.3 | 23 | 55.8 | 52.8 | 552 |
| 8 | 5.32 | 60.8 | 58.8 | 24.5 | 49.7 | 46.7 | 546.73 |
| 10 | 5.95 | 59.3 | 57.3 | 25 | 47.8 | 44.8 | 545.38 |
| 16 | 7.55 | 56.2 | 54.2 | 25 | 43.7 | 40.7 | 543 |
| 20 | 8.47 | 54.8 | 52.8 | 25 | 41.8 | 38.8 | 542.05 |
| 25 | 9.51 | 53.3 | 41.3 | 24.3 | 39.8 | 36.8 | 541.2 |
| 31.25 | 10.67 | 51.9 | 49.9 | 23.6 | 37.9 | 34.9 | 540.44 |
| 62.5 | 15.38 | 47.7 | 45.4 | 21.5 | 31.9 | 28.9 | 538.55 |
| 100 | 19.8 | 44.3 | 42.3 | 20.1 | 27.8 | 24.8 | 537.6 |
| 200 | 28.98 | 39.8 | 37.8 | 18 | 21.8 | 18.8 | 536.54 |
| 250 | 32.85 | 38.3 | 36.3 | 17.3 | 19.8 | 16.8 | 536.27 |

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