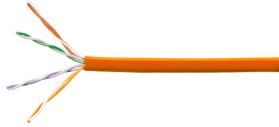


ETL Verified Category 5e U/UTP Cable, plenum, orange jacket, 4 pair count, 1000 ft (305 m) length, CommPak



Product Classification

| | |
|------------------------------|--|
| Regional Availability | Asia Australia/New Zealand Latin America North America |
| Portfolio | CommScope® |
| Product Type | Twisted pair cable |

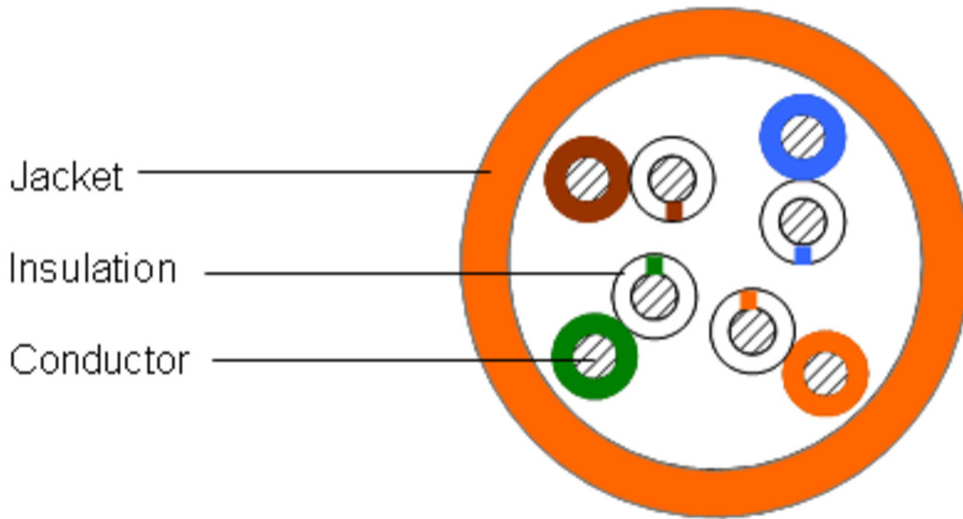
General Specifications

| | |
|--------------------------------|--|
| Product Number | CS27P |
| ANSI/TIA Category | 5e |
| Cable Component Type | Horizontal |
| Cable Type | U/UTP (unshielded) |
| Conductor Type, singles | Solid |
| Conductors, quantity | 8 |
| Jacket Color | Orange |
| Note | All electrical transmission tests include swept frequency measurements |
| Pairs, quantity | 4 |
| Transmission Standards | ANSI/TIA-568.2-D CENELEC EN 50288-3-1 ISO/IEC 11801 Class D |

Dimensions

| | |
|--------------------------------------|---------------------|
| Cable Length | 304.8 m 1000 ft |
| Diameter Over Jacket, nominal | 4.877 mm 0.192 in |
| Jacket Thickness | 0.508 mm 0.02 in |
| Conductor Gauge, singles | 24 AWG |

Cross Section Drawing



Electrical Specifications

| | |
|--|---|
| Characteristic Impedance | 100 ohm |
| dc Resistance Unbalance, maximum | 5 % |
| dc Resistance, maximum | 9.38 ohms/100 m 2.859 ohms/100 ft |
| Delay Skew, maximum | 15 ns |
| Dielectric Strength, minimum | 1500 Vac 2500 Vdc |
| Mutual Capacitance at Frequency | 5.6 nF/100 m @ 1 kHz |
| Nominal Velocity of Propagation (NVP) | 76 % |
| Operating Frequency, maximum | 350 MHz |
| Operating Voltage, maximum | 80 V |
| Remote Powering | Fully complies with the recommendations set forth by IEEE 802.3bt (Type 4) for the safe delivery of power over LAN cable when installed according to ISO/IEC 14763-2, CENELEC EN 50174-1, CENELEC EN 50174-2 or TIA TSB-184-A |
| Safety Voltage Rating | 300 V |

Electrical Cable Performance

| | | | |
|---------------|---|---------------|---|
| CS | CommScope | NEXT | Near End Crosstalk (dB/100m) |
| STD | Refers to the standard value listed under Transmission Standards in the Electrical Specifications above | PSNEXT | Power Sum Near End Crosstalk (db/100m) |
| TYP | Typical Electrical Performance | ACRF | Attenuation to Crosstalk Ratio - Far End (dB/100m) |
| IL | Insertion Loss (dB/100m) | RL | Return Loss (dB) |
| ACR | Attenuation to Crosstalk Ratio (dB/100m) | ELTCTL | Equal Level Transverse Conversion Transfer Loss (dB/100m) |
| PSACR | Power Sum Attenuation to Crosstalk Ratio (dB/100m) | | |
| PSACRF | Power Sum Attenuation to Crosstalk Ratio - Far End (dB/100m) | | |
| TCL | Transverse Conversion Loss (dB/100m) | | |

| Freq. MHz | IL | | | NEXT | | | ACR | | | PSNEXT | | | PSACR | | | ACRF | | | PSACRF | | | RL | | |
|-----------|------|------|------|------|------|------|-------|------|------|--------|------|------|-------|------|------|------|------|------|--------|------|------|------|------|------|
| | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP |
| 1 | 2 | 2 | 1.9 | 67.3 | 65.3 | 81.9 | 65.3 | 63.3 | 80 | 64.3 | 62.3 | 79.5 | 62.3 | 60.3 | 77.6 | 65.8 | 63.8 | 75.7 | 62.8 | 60.8 | 74 | 20 | 20 | 33.9 |
| 4 | 4 | 4.1 | 3.9 | 58.3 | 56.3 | 72.6 | 54.3 | 52.2 | 68.7 | 55.3 | 53.3 | 70.3 | 51.3 | 49.2 | 66.5 | 53.8 | 51.8 | 64.2 | 50.8 | 48.8 | 62.6 | 23.3 | 23 | 30.2 |
| 8 | 5.7 | 5.8 | 5.5 | 53.8 | 51.8 | 67.9 | 48 | 46 | 62.4 | 50.8 | 48.8 | 65.5 | 45 | 43 | 59.9 | 47.7 | 45.7 | 58.6 | 44.7 | 42.7 | 56.9 | 25 | 24.5 | 34 |
| 10 | 6.4 | 6.5 | 6.2 | 52.3 | 50.3 | 66.4 | 45.9 | 43.8 | 60.2 | 49.3 | 47.3 | 63.9 | 42.9 | 40.8 | 57.7 | 45.8 | 43.8 | 56.6 | 42.8 | 40.8 | 54.9 | 25.5 | 25 | 37.1 |
| 16 | 8.2 | 8.2 | 7.9 | 49.2 | 47.2 | 63.1 | 41.1 | 39 | 55.2 | 46.2 | 44.2 | 60.8 | 38.1 | 36 | 52.9 | 41.7 | 39.7 | 52.5 | 38.7 | 36.7 | 50.9 | 25.5 | 25 | 36.4 |
| 20 | 9.2 | 9.3 | 8.9 | 47.8 | 45.8 | 61.7 | 38.6 | 36.5 | 52.9 | 44.8 | 42.8 | 59.4 | 35.6 | 33.5 | 50.5 | 39.8 | 37.8 | 50.6 | 36.8 | 34.8 | 48.9 | 25.5 | 25 | 37.1 |
| 25 | 10.3 | 10.4 | 9.9 | 46.3 | 44.3 | 60.2 | 36 | 33.9 | 50.3 | 43.3 | 41.3 | 57.9 | 33 | 30.9 | 48 | 37.8 | 35.8 | 48.6 | 34.8 | 32.8 | 46.9 | 24.8 | 24.3 | 36.4 |
| 31.25 | 11.6 | 11.7 | 11.1 | 44.9 | 42.9 | 58.2 | 33.3 | 31.2 | 47.1 | 41.9 | 39.9 | 55.9 | 30.3 | 28.2 | 44.8 | 35.9 | 33.9 | 46.7 | 32.9 | 30.9 | 45 | 24.1 | 23.6 | 36.8 |
| 62.5 | 16.8 | 17 | 15.9 | 40.4 | 38.4 | 53.8 | 23.5 | 21.4 | 37.8 | 37.4 | 35.4 | 51.5 | 20.5 | 18.4 | 35.6 | 29.9 | 27.9 | 40.8 | 26.9 | 24.9 | 39.1 | 22 | 21.5 | 32.4 |
| 100 | 21.8 | 22 | 20.4 | 37.3 | 35.3 | 49.6 | 15.3 | 13.3 | 29.3 | 34.3 | 32.3 | 47.4 | 12.5 | 10.3 | 27 | 25.8 | 23.8 | 37 | 22.8 | 20.8 | 35.1 | 20.6 | 20.1 | 28.5 |
| 155 | 27.8 | | 25.6 | 34.4 | | 46.2 | 6.7 | | 20.6 | 31.4 | | 43.9 | 3.7 | | 18.3 | 22 | | 32.8 | 19 | | 31.2 | 19.3 | | 27.1 |
| 200 | 32.1 | | 29.3 | 32.8 | | 44.9 | 0.7 | | 15.7 | 29.8 | | 42.7 | -2.3 | | 13.4 | 19.8 | | 30.7 | 16.8 | | 29 | 18.5 | | 26.2 |
| 250 | 36.5 | | 33 | 31.3 | | 43.4 | -5.2 | | 10.4 | 28.3 | | 41.1 | -8.2 | | 8.1 | 17.8 | | 28.7 | 14.8 | | 26.9 | 17.8 | | 25.2 |
| 300 | 40.6 | | 36.2 | 30.1 | | 41.1 | -10.4 | | 4.9 | 27.1 | | 38.9 | -13.4 | | 2.7 | 16.3 | | 27 | 13.3 | | 25.3 | 17.3 | | 25.7 |
| 350 | 44.4 | | 39.3 | 29.1 | | 39.7 | -15.3 | | 0.4 | 26.1 | | 37.4 | -18.3 | | -1.9 | 14.9 | | 25.2 | 11.9 | | 23.4 | 16.8 | | 26.3 |

Material Specifications

| | |
|----------------------------|------------------|
| Conductor Material | Bare copper |
| Insulation Material | FEP Polyolefin |
| Jacket Material | PVC |

Mechanical Specifications

| | |
|---------------------------------|------------------|
| Pulling Tension, maximum | 11.34 kg 25 lb |
|---------------------------------|------------------|

Environmental Specifications

| | |
|---------------------------------|--|
| Installation temperature | 0 °C to +60 °C (+32 °F to +140 °F) |
| Operating Temperature | -20 °C to +60 °C (-4 °F to +140 °F) |
| Environmental Space | Plenum |
| Flame Test Method | CMP/FT6 NEC Article 800 NFPA 262 UL 444 UL 910 |

Smoke Test Method CMP/FT6

Packaging and Weights

Cable weight 30.373 kg/km | 20.41 lb/kft

Packaging Type CommPak® box

Regulatory Compliance/Certifications

Agency

ISO 9001:2015

Classification

Designed, manufactured and/or distributed under this quality management system