

GenSPEED® 6 Category 6 F/UTP (ScTP) Cable

Standards-Compliant

Features and Benefits

- Foil shield reduces electromagnetic interference (EMI) for optimal performance
- Performance guaranteed to 250 MHz
- Improved cable temperature rating (90°C Plenum, 75°C Riser) for greater protection against increased operating temperatures and for high-wattage applications
- TRU-Mark® print legend contains footage markings from 1000' to 0'
- Made in U.S.A.

Applications

- IEEE 802.3: 1000 BASE-T, 100 BASE-TX, 10 BASE-T, PoE, PoE+
- ANSI/TIA 854: 1000 BASE-TX
- CDDI, Token Ring, ATM
- Digital Video
- Broadband and Baseband Analog Video

Standard Compliances

- ANSI/TIA 568-C.2
- NEC/CEC Type CMR (UL 1666) for Non-Plenum
- NEC/CEC Type CMP (NFPA 262) for Plenum
- UL Listed CMR-LP (0.5A) for Non-Plenum*
- UL Listed CMP-LP (0.7A) for Plenum**
- UL 444
- RoHS Compliant Directive 2011/65/EU
- ANSI/TIA 862 (Building Automation)
- ICEA S-116-732
- ICEA S-102-700
- ISO/IEC 11801 Ed. 2.0 (Class E)



*0.5A is the ampacity rating of the cable, which equates to 100 watts using 50 volts over four pairs.

**0.7A is the ampacity rating of the cable, which equates to 140 watts using 50 volts over four pairs.

Data subject to change without notice.



CONSTRUCTION

Conductors

- 23 AWG solid bare annealed copper

Insulation

- Non-Plenum: Polyolefin
- Plenum: Fluoropolymer

Color Code

- Pair 1: Blue-White/Blue
- Pair 2: Orange-White/Orange
- Pair 3: Green-White/Green
- Pair 4: Brown-White/Brown

Separator

- Cross-web

Core Wrap

- Barrier tape

Shield

- Polyester-backed aluminum foil

Drain Wire

- 24 AWG stranded (7/32) tinned copper

Jacket








- Non-Plenum: Flame-Retardant PVC
- Plenum: Low-Smoke, Flame-Retardant PVC

PHYSICAL DATA

| | CMR (Non-Plenum) | CMP (Plenum) |
|------------------------------------|------------------|--------------|
| Nominal Cable Diameter (in) | 0.310 | 0.298 |
| Nominal Cable Weight (lbs/1000 ft) | 40 | 50 |
| Minimum Bend Radius (in) | 2.25 | 2.50 |
| Maximum Pulling Force (lbs) | 40 | 40 |
| Temperature Rating (°C) | | |
| Installation: | 0 to +60 | 0 to +60 |
| Operation: | -20 to +75 | -20 to +90 |

PART NUMBERS

Standard packaging: 1000' Spool

| Jacket Color | Spool | |
|--|------------------|----------------|
| | CMR (Non-Plenum) | CMP (Plenum) |
|  Blue | 6133785 | 6131785 |
|  White | 6133787 | 6131787 |
|  Yellow | 6133788 | 6131788 |
|  Gray | 6133789 | 6131789 |
|  Red | 6133790 | 6131790 |
|  Orange | 6133791 | 6131791 |
|  Green | 6133792 | 6131792 |

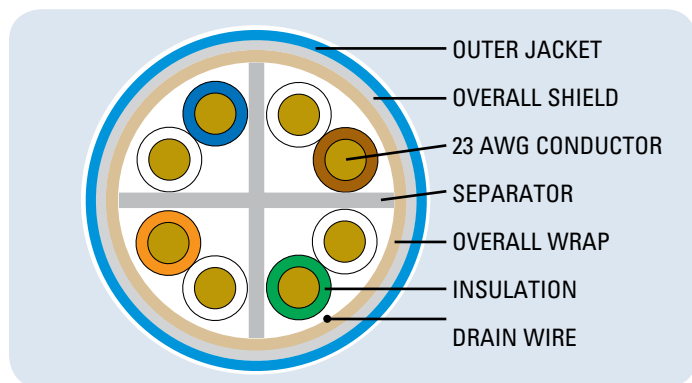
Note: Non-stock items may be subject to minimum order quantities.

ELECTRICAL PERFORMANCE

| Frequency MHz | PSACR* (min) | ACR* (min) | Insertion Loss (max) | PSNEXT (min) | NEXT (min) | PSACRF (min) | ACRF (min) | Return Loss (min) | TCL (min) | ELTCTL (min) |
|------------------|-----------------|---------------|----------------------------|-----------------|---------------|-----------------|---------------|----------------------|--------------|-----------------|
| 1 | 70.3 | 72.3 | 2.0 | 72.3 | 74.3 | 64.8 | 67.8 | 20.0 | 40.0 | 35.0 |
| 4 | 59.3 | 61.5 | 3.8 | 63.3 | 65.3 | 52.8 | 55.7 | 23.0 | 40.0 | 23.0 |
| 10 | 51.3 | 53.3 | 6.0 | 57.3 | 59.3 | 44.8 | 47.8 | 25.0 | 40.0 | 15.0 |
| 16 | 46.7 | 48.7 | 7.6 | 54.2 | 56.2 | 40.7 | 43.7 | 25.0 | 38.0 | 10.9 |
| 20 | 44.3 | 46.3 | 8.5 | 52.8 | 54.8 | 38.8 | 41.7 | 25.0 | 37.0 | 9.0 |
| 31.25 | 39.2 | 41.2 | 10.7 | 49.9 | 51.9 | 34.9 | 37.9 | 23.6 | 35.1 | — |
| 62.5 | 29.9 | 32.0 | 15.4 | 45.4 | 47.4 | 28.9 | 31.8 | 21.5 | 32.0 | — |
| 100 | 22.5 | 24.5 | 19.8 | 42.3 | 44.3 | 24.8 | 27.8 | 20.1 | 30.0 | — |
| 150 | 14.9 | 16.9 | 24.7 | 39.7 | 41.7 | 21.3 | 24.3 | 18.9 | 28.2 | — |
| 200 | 8.8 | 10.8 | 29.0 | 37.8 | 39.8 | 18.8 | 21.8 | 18.0 | 27.0 | — |
| 250 | 3.5 | 5.5 | 32.8 | 36.3 | 38.3 | 16.8 | 19.8 | 17.3 | 26.0 | — |
| 350 | — | — | 39.8 | 34.1 | 36.1 | 13.9 | 16.9 | 16.3 | — | — |
| 400 | — | — | 43.0 | 33.3 | 35.3 | 12.8 | 15.8 | 15.9 | — | — |
| 500 | — | — | 48.9 | 31.8 | 33.8 | 10.8 | 13.8 | 15.2 | — | — |

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20°C. Results beyond 250 MHz are for reference only.
*PSACR & ACR not specified in ANSI/TIA 568-C.2

**GenSPEED® CATEGORY 6 F/UTP (ScTP)
CROSS-SECTION**



ELECTRICAL CHARACTERISTICS

| | |
|---|------------------|
| DC Resistance (max) Ohms/100 m (328 ft) @ 20°C | 9.38 |
| DC Resistance Unbalance (max) Individual Pair % | 4.00 |
| Delay Skew (max) ns/100 m | 45 |
| Nom. Velocity of Propagation % Speed of Light | 70 |
| Characteristic Impedance Frequency (f): 1-250 MHz | Ohms 100 ± 15 |