

# GenSPEED® 6000 Enhanced Category 6 Cable

## Optimally Balanced Enhanced Performance

### Features and Benefits

- Innovative cross-web design allowing for maximum pair separation, increasing key electrical performance parameters
- Performance guaranteed to 350 MHz
- TRU-Mark® print legend contains footage markings from 1000' to 0'
- Third-party verified for guaranteed performance
- 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 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)



### 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

#### Rip Cord

- Applied longitudinally under jacket

#### Jacket

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

### PHYSICAL DATA

|                                    | CMR (Non-Plenum) | CMP (Plenum) |
|------------------------------------|------------------|--------------|
| Nominal Cable Diameter (in)        | 0.235            | 0.215        |
| Nominal Cable Weight (lbs/1000 ft) | 28               | 28           |
| Minimum Bend Radius (in)           | 1.0              | 1.0          |
| Maximum Pulling Force (lbs)        | 32               | 32           |
| Temperature Rating (°C)            |                  |              |
| Installation:                      | 0 to +60         | 0 to +60     |
| Operation:                         | -20 to +75       | -20 to +75   |

### PART NUMBERS

Standard packaging: 1000' Pull-Pac® II

| Jacket Color | Pull-Pac® II     |              | Spool-Pac®       |              | Spool            |              |
|--------------|------------------|--------------|------------------|--------------|------------------|--------------|
|              | CMR (Non-Plenum) | CMP (Plenum) | CMR (Non-Plenum) | CMP (Plenum) | CMR (Non-Plenum) | CMP (Plenum) |
| Blue         | 7133900          | 7131900      | 7133940          | 7131940      | 7133960          | 7131960      |
| White        | 7133901          | 7131901      | 7133941          | 7131941      | 7133961          | 7131961      |
| Yellow       | 7133902          | 7131902      | 7133942          | 7131942      | 7133962          | 7131962      |
| Gray         | 7133903          | 7131903      | 7133943          | 7131943      | 7133963          | 7131963      |
| Red          | 7133904          | 7131904      | 7133944          | 7131944      | 7133964          | 7131964      |
| Orange       | 7133905          | 7131905      | 7133945          | 7131945      | 7133965          | 7131965      |
| Green        | 7133906          | 7131906      | 7133946          | 7131946      | 7133966          | 7131966      |
| Black        | 7133907          | 7131907      | 7133947          | 7131947      | 7133967          | 7131967      |
| Pink         | 7133908          | 7131908      | 7133948          | 7131948      | 7133968          | 7131968      |
| Purple       | 7133909          | 7131909      | 7133949          | 7131949      | 7133969          | 7131969      |

Note: Bulk reels are available as a special request with a maximum allowable length of 3000 feet per reel. Minimum run and lead time may apply.

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

Data subject to change without notice.

**ELECTRICAL PERFORMANCE**

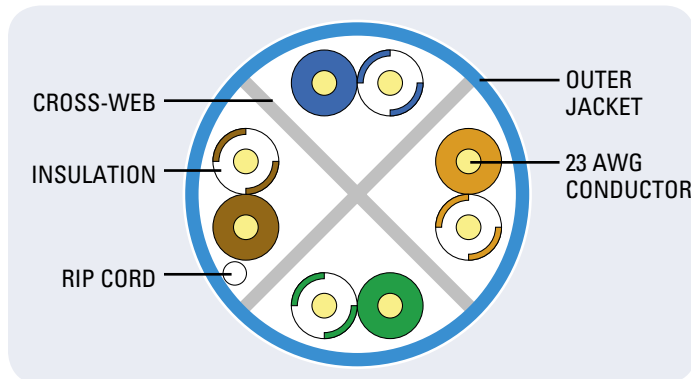
| Frequency<br>MHz | PSACR* (min) |             | ACR* (min) |             | Insertion Loss (max) |             | PSNEXT (min) |             | NEXT (min) |             |
|------------------|--------------|-------------|------------|-------------|----------------------|-------------|--------------|-------------|------------|-------------|
|                  | Guaranteed   | TIA 568-C.2 | Guaranteed | TIA 568-C.2 | Guaranteed           | TIA 568-C.2 | Guaranteed   | TIA 568-C.2 | Guaranteed | TIA 568-C.2 |
| 1                | 75.3         | 77.3        | 2.0        | 2.0         | 72.3                 | 77.3        | 74.3         | 79.3        |            |             |
| 4                | 64.5         | 66.5        | 3.8        | 3.8         | 63.3                 | 68.3        | 65.3         | 70.3        |            |             |
| 10               | 56.4         | 58.4        | 6.0        | 5.9         | 57.3                 | 62.3        | 59.3         | 64.3        |            |             |
| 16               | 51.7         | 53.8        | 7.6        | 7.5         | 54.2                 | 59.3        | 56.2         | 61.3        |            |             |
| 20               | 49.4         | 51.4        | 8.5        | 8.4         | 52.8                 | 57.8        | 54.8         | 59.8        |            |             |
| 31.25            | 44.3         | 46.3        | 10.7       | 10.6        | 49.9                 | 54.9        | 51.9         | 56.9        |            |             |
| 62.5             | 35.1         | 37.1        | 15.4       | 15.3        | 45.4                 | 50.4        | 47.4         | 52.4        |            |             |
| 100              | 27.6         | 29.6        | 19.8       | 19.7        | 42.3                 | 47.3        | 44.3         | 49.3        |            |             |
| 150              | 20.0         | 22.0        | 24.7       | 24.7        | 39.7                 | 44.7        | 41.7         | 46.7        |            |             |
| 200              | 13.8         | 15.8        | 29.0       | 29.0        | 37.8                 | 42.8        | 39.8         | 44.8        |            |             |
| 250              | 8.7          | 10.7        | 32.8       | 32.6        | 36.3                 | 41.3        | 38.3         | 43.3        |            |             |
| 350              | —            | 1.7         | —          | 39.5        | —                    | 39.2        | —            | 41.2        |            |             |
| 500              | —            | —           | —          | 48.6        | —                    | 36.8        | —            | 38.8        |            |             |

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20°C. Results beyond 350 MHz for reference only.  
 \*PSACR & ACR not specified in ANSI/TIA 568-C.2

| Frequency<br>MHz | PSACRF (min) |             | ACRF (min) |             | Return Loss (min) |             | TCL (min)  |             | ELTCTL (min) |             |
|------------------|--------------|-------------|------------|-------------|-------------------|-------------|------------|-------------|--------------|-------------|
|                  | Guaranteed   | TIA 568-C.2 | Guaranteed | TIA 568-C.2 | Guaranteed        | TIA 568-C.2 | Guaranteed | TIA 568-C.2 | Guaranteed   | TIA 568-C.2 |
| 1                | 64.8         | 69.8        | 67.8       | 72.8        | 20.0              | 20.0        | 40.0       | 40.0        | 35.0         | 35.0        |
| 4                | 52.8         | 57.7        | 55.7       | 60.7        | 23.0              | 23.6        | 40.0       | 40.0        | 23.0         | 23.0        |
| 10               | 44.8         | 49.8        | 47.8       | 52.8        | 25.0              | 26.0        | 40.0       | 40.0        | 15.0         | 15.0        |
| 16               | 40.7         | 45.7        | 43.7       | 48.7        | 25.0              | 26.0        | 38.0       | 38.0        | 10.9         | 10.9        |
| 20               | 38.8         | 43.7        | 41.7       | 46.7        | 25.0              | 26.0        | 37.0       | 37.0        | 9.0          | 9.0         |
| 31.25            | 34.9         | 39.9        | 37.9       | 42.9        | 23.6              | 25.0        | 35.1       | 35.1        | —            | 5.1         |
| 62.5             | 28.9         | 33.8        | 31.8       | 36.8        | 21.5              | 23.5        | 32.0       | 32.0        | —            | 5.0         |
| 100              | 24.8         | 29.8        | 27.8       | 32.8        | 20.1              | 22.5        | 30.0       | 30.0        | —            | 5.0         |
| 150              | 21.3         | 26.3        | 24.3       | 29.3        | 18.9              | 21.6        | 28.2       | 28.2        | —            | 5.0         |
| 200              | 18.8         | 23.8        | 21.8       | 26.8        | 18.0              | 21.0        | 27.0       | 27.0        | —            | 5.0         |
| 250              | 16.8         | 21.8        | 19.8       | 24.8        | 17.3              | 20.5        | 26.0       | 26.0        | —            | 5.0         |
| 350              | —            | 18.9        | —          | 21.9        | —                 | 19.8        | —          | —           | —            | —           |
| 500              | —            | 15.8        | —          | 18.8        | —                 | 19.0        | —          | —           | —            | —           |

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20°C. Results beyond 350 MHz for reference only.

**GenSPEED® 6000 ENHANCED CATEGORY 6 CROSS-SECTION**



**ELECTRICAL CHARACTERISTICS**

|   | Max.               | Nom.               |
|---|--------------------|--------------------|
| <b>DC Resistance</b><br>Ohms/100 m (328 ft) @ 20°C      | 9.38               | 7.20               |
| <b>DC Resistance Unbalance</b><br>Individual Pair %     | 4.00               | < 1                |
| <b>Delay Skew</b><br>ns/100 m                           | 45                 | CMP: 30<br>CMR: 40 |
| <b>Nom. Velocity of Propagation</b><br>% Speed of Light | CMP: 70<br>CMR: 68 |                    |
| <b>Characteristic Impedance</b><br>Frequency (f):       | Ohms<br>100 ± 15   |                    |