

# GenSPEED® 6000 Enhanced Category 6 Cable

## 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

## Applications

- IEEE 802.3: 1000 BASE-T (Gigabit Ethernet), 100 BASE-TX, 10 BASE-T
- ANSI/TIA/EIA 854: 1000 BASE-TX
- 155 Mp/s, 1.2 Gb/s ATM
- ANSI X3.263: 100 Mb/s
- IEEE 802.3af DTE Power (PoE)
- Digital Video
- Broadband and Baseband Analog Video
- Draft IEEE 802.3at for PoE Plus

## Standard Compliances

- ANSI/TIA/EIA 568 B.2-1
- TIA 568 C Draft
- ANSI/TIA/EIA 862 (Building Automation)
- ISO/IEC 11801 Ed. 2.0 (Class E)
- ICEA S-102-700 (Category 6)
- NEC/CEC Type CMR (UL 1666) for Non-Plenum
- NEC/CEC Type CMP (NFPA 262) for Plenum
- RoHS Compliant Directive 2002/95/EC
- UL 444



## 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	0.225
Nominal Cable Weight (lbs/1000ft)	28	31
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.

## Optimally Balanced Enhanced Performance

### GenSPEED® 6000 Electrical Performance

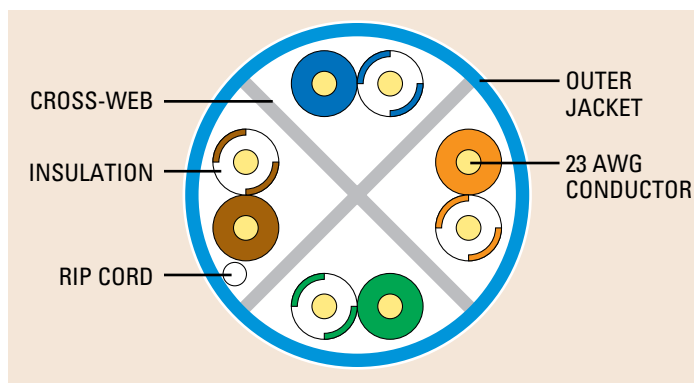
Frequency MHz	PSACR (min)		ACR (min)		Attenuation (max)		PSNEXT (min)		NEXT (min)	
	TIA 568 B.2-1	Guaranteed	TIA 568 B.2-1	Guaranteed	TIA 568 B.2-1	Guaranteed	TIA 568 B.2-1	Guaranteed	TIA 568 B.2-1	Guaranteed
1	70.3	75.3	72.3	77.3	2.0	2.0	72.3	77.3	74.3	79.3
4	59.3	64.5	61.5	66.5	3.8	3.8	63.3	68.3	65.3	70.3
10	51.3	56.4	53.3	58.4	6.0	5.9	57.3	62.3	59.3	64.3
16	46.7	51.7	48.7	53.8	7.6	7.5	54.2	59.3	56.2	61.3
20	44.3	49.4	46.3	51.4	8.5	8.4	52.8	57.8	54.8	59.8
31.25	39.2	44.3	41.2	46.3	10.7	10.6	49.9	54.9	51.9	56.9
62.5	29.9	35.1	32.0	37.1	15.4	15.3	45.4	50.4	47.4	52.4
100	22.5	27.6	24.5	29.6	19.8	19.7	42.3	47.3	44.3	49.3
150	14.9	20.0	16.9	22.0	24.7	24.7	39.7	44.7	41.7	46.7
200	8.8	13.8	10.8	15.8	29.0	29.0	37.8	42.8	39.8	44.8
250	3.5	8.7	5.5	10.7	32.8	32.6	36.3	41.3	38.3	43.3
350	—	—	—	1.7	—	—	—	39.2	—	41.2
500	—	—	—	—	—	48.6	—	36.8	—	38.8

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

Frequency MHz	PSELFEXT (min)		ELFEXT (min)		Return Loss (min)		LCL (min)		ELTCTL (min)	
	TIA 568 B.2-1	Guaranteed	TIA 568 B.2-1	Guaranteed	TIA 568 B.2-1	Guaranteed	TIA 568 B.2-1	Guaranteed	TIA 568 B.2-1	Guaranteed
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	5.1
62.5	28.9	33.8	31.8	36.8	21.5	23.5	32.0	32.0	5.0	5.0
100	24.8	29.8	27.8	32.8	20.1	22.5	30.0	30.0	5.0	5.0
150	21.3	26.3	24.3	29.3	18.9	21.6	28.2	28.2	5.0	5.0
200	18.8	23.8	21.8	26.8	18.0	21.0	27.0	27.0	5.0	5.0
250	16.8	21.8	19.8	24.8	17.3	20.5	26.0	26.0	5.0	5.0
350	—	18.9	—	21.9	—	19.8	—	—	—	—
500	—	15.8	—	18.8	—	19.0	—	—	—	—

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

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



### ELECTRICAL CHARACTERISTICS

<b>DC Resistance (max)</b> Ohms/100m (328ft) @ 20°C	9.38
<b>DC Resistance Unbalance (max)</b> Individual Pair %	4.0
<b>Delay Skew (max)</b> ns/100m	CMP: 35 CMR: 38
<b>Nom. Velocity of Propagation</b> % Speed of Light	CMP: 70 CMR: 68
<b>Characteristic Impedance</b> Frequency (f):	Ohms 100 ± 15
<b>Input Impedance</b> Frequency (f):	Ohms 1-100 MHz: 100 ± 15 100-250 MHz: 100 ± 22 250-500 MHz: 100 ± 32