

# GenSPEED<sup>®</sup> 6 Category 6 Cable

Standards-Compliant Extended Frequency

Future-proof your installations with GenSPEED<sup>®</sup> 6 Category 6 cable, now certified LP by Underwriters Laboratories (UL).

**Utilizes EfficienC™ Max Technology to Support High-Wattage Power over Ethernet (PoE) Applications**

GenSPEED<sup>®</sup> 6 Category 6 cable goes beyond the proposed IEEE 802.3bt standard of 49 W to up to **100 W\*** for even more coverage of high-wattage equipment.

**Cable Temperature Rated to 90°C for Higher Protection Against Increased Operating Temperatures and for High-Wattage Applications**

General Cable's EfficienC Max cable is rated to 90°C and constructed of 100% fluoropolymer insulation to offer higher protection against increased operating temperatures and:

- Surpasses the industry standard of 60°C
- Prevents material degradation from elevated temperatures over extended periods
- Reduces impact of high-powered non-standard PoE applications

**First to Industry with UL Listing CMP-LP (0.5A)\***

**Can Contribute to Two LEED<sup>®</sup> points with Environmental and Health Product Declarations (EPDs and HPDs)**

**Unique Separator Design Engineered for Consistent Electrical Performance**

**Performance Guaranteed to 350 MHz**

**TRU-Mark<sup>®</sup> Print Legend Contains Footage Markings from 1000' to 0'**

**Third-Party Verified for Guaranteed Performance**



Supports up to 100 Watts\*

FEATURING  
**EFFICIENC™ MAX**  
technology to support PoE applications

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

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### 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 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 EA)



### 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

- Divider

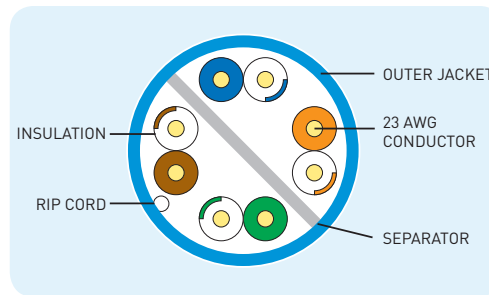
#### Rip Cord

- Applied longitudinally under jacket

#### Jacket

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

### GenSPEED<sup>®</sup> 6 CATEGORY 6 CROSS-SECTION



### PHYSICAL DATA

	CMP
Nominal Cable Diameter (in)	0.205
Nominal Cable Weight (lbs/1000 ft)	25
Minimum Bend Radius (in)	1.0
Maximum Pulling Force (lbs)	32
Temperature Rating (°C)	
Installation:	0 to +60
Operation:	-20 to +90

### CMP (PLENUM) PART NUMBERS

Standard Packaging: 1000' Pull-Pac<sup>®</sup> II

Jacket Color	Pull-Pac <sup>®</sup> II	Spool-Pac <sup>®</sup>	Spool
Blue	7131800	7131840	7131860
White	7131801	7131841	7131861
Yellow	7131802	7131842	7131862
Gray	7131803	7131843	7131863
Red	7131804	7131844	7131864
Orange	7131805	7131845	7131865
Green	7131806	7131846	7131866
Black	7131807	7131847	7131867
Pink	7131808	7131848	7131868
Purple	7131809	7131849	7131869

### ELECTRICAL CHARACTERISTICS

	Max.	Nom.
<b>DC Resistance</b> Ohms/100 m (328 ft) @ 20° C	9.38	7.00
<b>DC Resistance Unbalanced</b> Individual Pair %	4.00	< 1
<b>Delay Skew</b> ns/100 m	45	29.5
<b>Nom. Velocity of Propagation</b> % Speed of Light	70	
<b>Characteristic Impedance</b> Frequency (f): 1-500 MHz	Ohms 100 ± 15	

### ELECTRICAL PERFORMANCE

Frequency MHz	PSACR* (min)	ACR* (min)	Insertion Loss (min)	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 350 MHz are for reference only.  
\*PSACR & ACR not specified in ANSI/TIA 568-C.2