

# GenSPEED® 10 UTP Gen5 Category 6A Cable

## Industry's Smallest Full Channel, Component Compliant 6A Cable

### Features and Benefits

- Innovative 5th Generation design provides guaranteed performance using the industry's smallest 6A cable. Guaranteed +2 dB over TIA 568.2-D Standard for PSANEXT.
- Simplified design and improved bend radius make it easier to strip, terminate and route, reducing installation time and expense.
- UL Listed CMP-LP 0.7A with certified performance for high-power PoE applications.
- CMP - UL verified with certified performance for 100W power over HDBaseT.
- CMP 105°C jacket rating provides greater protection against increased operating temperatures and for high-wattage applications.
- TRU-Mark® print legend contains footage markings from 1000' to 0'
- All GenSPEED products are made in the U.S.A.

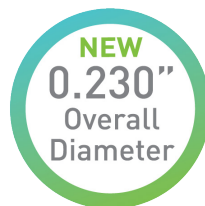
### Applications

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

### Standard Compliances

- ANSI/TIA 568.2-D
- NEC/CEC Type CMP (NFPA 262) for Plenum
- UL Listed CMP-LP 0.7A\*
- UL 444
- UL 4299
- RoHS Compliant Directive 2011/65/EU
- ANSI/TIA 862 (Building Automation)
- ICEA S-116-732
- ISO/IEC 11801 Ed. 2.0 (Class E<sub>2</sub>)

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



### CONSTRUCTION

#### Conductors

- 23 AWG solid bare annealed copper

#### Insulation

- Plenum: Fluoropolymer

#### Color Code

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

#### ANEXT Protection:

- Encapsulated Isolated Wrap

#### Jacket

- Plenum: Low-Smoke, Flame-Retardant PVC

### PHYSICAL DATA

	CMP (Plenum)
Nominal Cable Diameter (in)	0.230
Nominal Cable Weight (lbs/1000 ft)	30
Minimum Bend Radius (in)	1
Maximum Pulling Force (lbs)	40
Temperature Rating (°C)	
Installation:	0 to +60
Operation:	-20 to +105

### PART NUMBERS

Jacket Color	CMP (Plenum)		
	Spool	Spoolpac	Pull-Pac®
Blue	7151819	7151869	7151800
White	7151820	7151870	7151801
Gray	7151821	7151872	7151803
Yellow	7151822	7151871	7151802
Green	7151823	7151875	7151806
Red	7151824	7151873	7151804
Purple	7151825	7151877	7151809
Orange	7151826	7151874	7151805
Pink	7151827	7151878	7151808
Black	7151828	7151876	7151807

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



**ELECTRICAL PERFORMANCE**

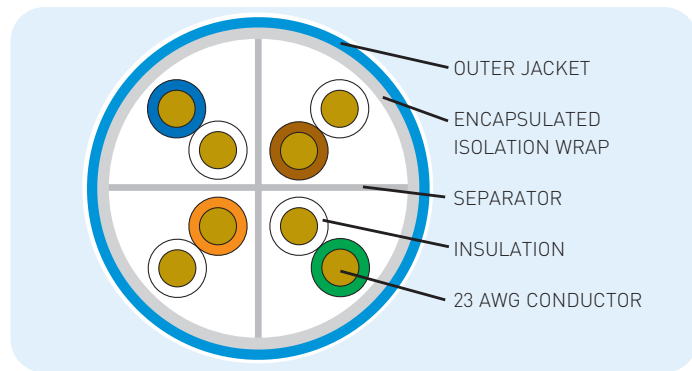
Frequency MHz	PSACR** (min)	ACR** (min)	Insertion Loss (min)	PSNEXT (min)	NEXT (min)	PSACRF (min)	ACRF (min)	Return Loss (min)	TCL (min)	PSANEXT (min)		PSAACRF (min)	
	TIA / GC Guaranteed	TIA / GC Guaranteed	TIA / GC Guaranteed	TIA / GC Guaranteed	TIA / GC Guaranteed	TIA / GC Guaranteed	TIA / GC Guaranteed	TIA / GC Guaranteed	TIA / GC Guaranteed	TIA	GC Guaranteed	TIA	GC Guaranteed
1	70.2	72.2	2.1	72.3	74.3	64.8	67.8	20.0	40.0	67.0	69.0	67.0	69.0
4	59.5	61.5	3.8	63.3	65.3	52.8	55.8	23.0	40.0	67.0	69.0	66.2	68.2
10	51.4	53.4	5.9	57.3	59.3	44.8	47.8	25.0	40.0	67.0	69.0	58.2	60.2
16	46.8	48.8	7.5	54.2	56.2	40.7	43.7	25.0	38.0	67.0	69.0	54.1	56.1
20	44.4	46.4	8.4	52.8	54.8	38.8	41.8	25.0	37.0	67.0	69.0	52.2	54.2
31.25	39.4	41.4	10.5	49.9	51.9	34.9	37.9	23.6	35.1	67.0	69.0	48.3	50.3
62.5	30.4	32.4	15.0	45.4	47.4	28.9	31.9	21.5	32.0	65.6	67.6	42.3	44.3
100	23.2	25.2	19.1	42.3	44.3	24.8	27.8	20.1	30.0	62.5	64.5	38.2	40.2
150	16.0	18.0	23.7	39.7	41.7	21.3	24.3	18.9	28.2	59.9	61.9	34.7	36.7
200	10.2	12.2	27.6	37.8	39.8	18.8	21.8	18.0	27.0	58.0	60.0	32.2	34.2
250	5.2	7.2	31.1	36.3	38.3	16.8	19.8	17.3	26.0	56.5	58.5	30.2	32.2
300	0.9	2.9	34.3	35.1	37.1	15.3	18.3	16.8	25.2	55.3	57.3	28.7	30.7
400	—	—	40.1	33.3	35.3	12.8	15.8	15.9	24.0	53.5	55.5	26.2	28.2
500	—	—	45.3	31.8	33.8	10.8	13.8	15.2	23.0	52.0	54.0	24.2	26.2
600*	—	—	50.1*	30.6*	32.6*	9.2*	12.2*	14.7*	22.2*	—	50.8*	—	22.6*
700*	—	—	54.5*	29.6*	31.6*	7.9*	10.9*	14.2*	21.5*	—	49.8*	—	21.3*
750*	—	—	56.7*	29.2*	31.2*	7.3*	10.3*	14.0*	21.2*	—	49.4*	—	20.7*

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20°C.

\*Values are for reference only.

\*\*PSACR & ACR not specified in ANSI/TIA 568.2-D

**CROSS-SECTION**



**ELECTRICAL CHARACTERISTICS**

	Max.	Nom.
<b>DC Resistance</b> Ohms/100 m (328 ft) @ 20°C	9.38	7.50
<b>DC Resistance Unbalanced</b> Individual Pair %	4.00	< 1
<b>Delay Skew (Max)</b> ns/100 m	45	
<b>Nom. Velocity of Propagation</b> % Speed of Light	70	
<b>Characteristic Impedance</b> Frequency (f): 1-500 MHz	Ohms 100 ± 15	