

# GenSPEED® 10,000

## Standard-Compliant 6a



GenSPEED® 10,000 Category 6a cable is a cost-effective, standard-compliant UTP 10 Gig option designed to meet ANSI/TIA 568 B.2-10. Perfect for component upgrades, this cable is fully backward-compatible to legacy infrastructures, and it prepares your system for future 10 Gigabit applications. GenSPEED 10,000 solves the One Gigabit limitation of Category 5e and Category 6 and is an ideal solution for bandwidth-intensive applications.

### FEATURES & BENEFITS

- Extensive design development conducted to find the perfect blend of product performance and consistent manufacturability
- Innovative T-Top cross-web provides superior internal electrical characteristics by locking the pairs into a systematic orientation within the cable
- Superior flame and smoke characteristics achieved through innovative design and careful selection of materials with certified suppliers

### CONSTRUCTION

#### Conductors

- 23 AWG solid bare annealed copper

#### Insulation

- Non-Plenum: Polyolefin
- Plenum: Fluoropolymer

#### Pairing

- 4 Pair

#### Color Code

- Blue/White
- Orange/White
- Green/White
- Brown/White

#### Separator

- T-Top cross-web

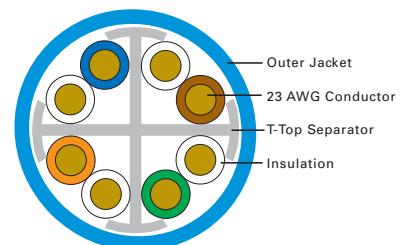
#### Jacket

- Non-Plenum: Flame-retardant PVC
- Plenum: Low-smoke, flame-retardant PVC

### APPLICATIONS

- IEEE 802.3 10G Base-T, 100 Base-T
- 100 Base-TX, 10 Base-T, 1000 Base-TX
- 155 Mb/s ATM
- ANSI X3.263 100Mb/s
- IEEE 802.3af for PoE
- Draft IEEE 802.3at for PoE Plus

### Typical GenSPEED® 10,000 Category 6a Cross-Section



### COMPLIANCES

- ANSI/TIA 568 B.2-10
- RoHS

# GenSPEED® 10,000 Category 6a Cable

## ELECTRICAL CHARACTERISTICS

<b>DC Resistance (max)</b> Ohms/100m (328ft) @ 20°C	9.38 ohms/100m
<b>DC Resistance Unbalanced (max)</b> Individual Pair %	4%
<b>Delay Skew (max)</b> ns/100m	35 ns/100m
<b>Nom. Velocity of Propagation</b> % Speed of Light	70%
<b>Characteristic Impedance</b> Frequency (f):	1-500MHz 100 ohms ± 15 ohms

## PART NUMBERS

Standard packaging: 1000' Reel

Jacket Color	Reel	
	CMR (Riser)	CMP (Plenum)
Blue	7133819	7131819
White	7133820	7131820
Gray	7133821	7131821
Yellow	7133822	7131822
Green	7133823	7131823
Red	7133824	7131824
Purple	7133825	7131825
Orange	7133826	7131826
Pink	7133827	7131827
Black	7133828	7131828

## PHYSICAL DATA

	CMR (Non-Plenum)	CMP (Plenum)
<b>Nominal Cable Diameter (in)</b>	.330	.320
<b>Nominal Cable Weight (lbs/1000 ft)</b>	42	45
<b>Minimum Bend Radius (in)</b>	1.5	1.5
<b>Maximum Pulling Force (lbs)</b>	40	40
<b>Temperature Rating (°C)</b>		
Installation:	0 to +60	0 to +60
Operation:	-20 to +75	-20 to +75

## ELECTRICAL PERFORMANCE

Frequency MHz	PSACR Min.	ACR Min.	Attenuation Max.	PSNEXT Min.	NEXT Min.	PSACRF Min.	ACRF Min.	Return Loss Min.	TCL Min.	PSANEXT Min.	PSAACRF Min.
1	70.2	72.2	2.1	72.3	74.3	64.8	67.8	20.0	40.0	67.0	67.0
4	59.5	61.5	3.8	63.3	65.3	52.8	55.8	23.0	40.0	67.0	66.2
8	53.5	55.5	5.3	58.8	60.8	46.7	49.7	24.5	40.0	67.0	60.1
10	51.4	53.4	5.9	57.3	59.3	44.8	47.8	25.0	40.0	67.0	58.2
16	46.7	48.7	7.5	54.2	56.2	40.7	43.7	25.0	38.0	67.0	54.1
20	44.4	46.4	8.4	52.8	54.8	38.8	41.8	25.0	37.0	67.0	52.2
25	41.9	43.9	9.4	51.3	53.3	36.8	39.8	24.3	36.0	67.0	50.2
31.25	39.4	41.4	10.5	49.9	51.9	34.9	37.9	23.6	35.1	67.0	48.3
62.50	30.4	32.4	15.0	45.4	47.4	28.9	31.9	21.5	32.0	65.6	42.3
100	23.2	25.2	19.1	42.3	44.3	24.8	27.8	20.1	30.0	62.5	38.2
200	10.2	12.2	27.6	37.8	39.8	18.8	21.8	18.0	27.0	58.0	32.2
250	5.2	7.2	31.1	36.3	38.3	16.8	19.8	17.3	26.0	56.5	30.2
300	0.8	2.8	34.3	35.1	37.1	15.3	18.3	16.8	25.2	55.3	28.7
400	—	—	40.1	33.3	35.3	12.8	15.8	15.9	24.0	53.5	26.2
500	—	—	45.3	31.8	33.8	10.8	13.8	15.2	23.0	52.0	24.2



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