

GenSPEED® 10,000 Category 6a Shielded Cable

Features And Benefits

- Shielded design allowing for maximum pair separation, increasing key electrical performance parameters
- Individual pair shielding for EMI protection
- Typical positive PSACR beyond 500 MHz for increased available bandwidth
- TRU-Mark® print legend contains footage markings from 1000' to 0'

Applications

- IEEE 802.3an: 10G BASE-T (10 Gigabit Ethernet) supporting 100 meters
- 1000 BASE-TX (Gigabit Ethernet)
- 2.4/1.2 Gb/s ATM

Standard Compliances

- ANSI/TIA/EIA 568 B.2-10
- TIA 568 C Draft
- 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: HDPE
- Plenum: Foamed Fluoropolymer

Color Code

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

Shield

- Each pair is individually shielded with an aluminum foil
- 24 AWG drain wire

Jacket









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

PHYSICAL DATA

	CMR (Non-Plenum)	CMP (Plenum)
Nominal Cable Diameter (in)	0.310	0.290
Nominal Cable Weight (lbs/1000ft)	50	45
Minimum Bend Radius (in)	3.10	2.90
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' Spool

Jacket Color	Spool	
	CMR (Non-Plenum)	CMP (Plenum)
 Blue	7133786	7131786
 White	7133787	7131787
 Yellow	7133788	7131788
 Gray	7133789	7131789
 Red	7133790	7131790
 Orange	7133791	7131791
 Green	7133792	7131792
 Purple	7133830	7131830

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

Data subject to change without notice.

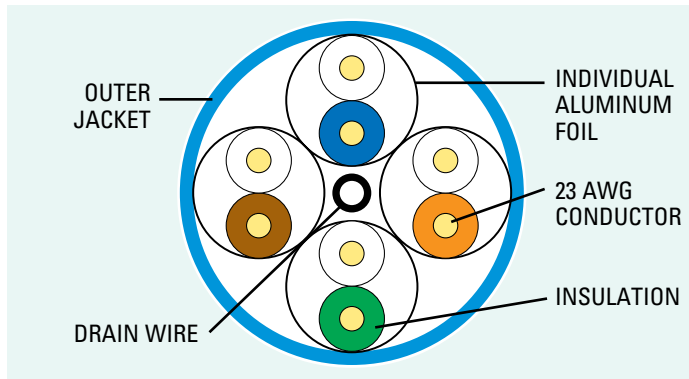
A Shielded 10 Gig Option for Peace of Mind

ELECTRICAL PERFORMANCE

Frequency MHz	PSACR (min)	ACR (min)	Attenuation (max)	PSNEXT (min)	NEXT (min)	PSELFEXT (min)	ELFEXT (min)	Return Loss (min)	LCL/TCL (min)	PSANEXT (min)	PSAACRF (min)
1	70.2	72.2	2.1	72.3	74.3	70.8	73.8	20.0	50.0	77.0	77.0
4	68.5	70.5	3.8	72.3	74.3	58.8	61.8	23.0	44.0	77.0	76.2
10	66.3	68.3	5.9	72.3	74.3	50.8	53.8	25.0	40.0	77.0	68.2
16	63.6	66.6	7.5	71.2	74.2	46.7	49.7	25.0	38.0	77.0	64.1
20	61.3	64.3	8.4	69.8	72.8	44.8	47.8	25.0	37.0	77.0	62.2
31.25	56.1	59.1	10.5	66.9	69.9	40.9	43.9	23.6	35.1	77.0	58.3
62.5	46.9	49.9	15.0	62.4	65.4	34.9	37.9	21.5	32.0	75.6	52.3
100	39.4	42.4	19.1	59.3	62.3	30.8	33.8	20.1	30.0	72.5	48.2
200	25.6	28.6	27.6	54.8	57.8	24.8	27.8	18.0	27.0	68.0	42.2
250	20.3	23.3	31.1	53.3	56.3	22.8	25.8	17.3	26.0	66.5	40.2
300	15.5	18.5	34.3	52.1	55.1	21.3	24.3	16.8	25.2	65.3	38.7
350	11.2	14.2	37.2	51.1	54.1	19.9	22.9	16.3	24.6	64.3	37.3
400	7.1	10.1	40.1	50.3	53.3	18.8	21.8	15.9	24.0	63.5	36.2
500	—	2.7	45.3	48.8	51.8	16.8	19.8	15.2	23.0	62.0	34.2
600	—	—	50.1	47.6	50.6	15.2	18.2	14.7	22.2	60.8	32.6

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

GenSPEED® 10,000 SHIELDED CATEGORY 6a CROSS-SECTION



ELECTRICAL CHARACTERISTICS

DC Resistance (max) Ohms/100m (328ft) @ 20°C	8.9
DC Resistance Unbalance (max) Individual Pair %	3.0
Delay Skew (max) ns/100m	35
Nom. Velocity of Propagation % Speed of Light	CMP: 78 CMR: 75
Characteristic Impedance Frequency (f): 1-600 MHz	Ohms 100 ± 15
Input Impedance Frequency (f):	Ohms 1-100 MHz: 100 ± 15 100-200 MHz: 100 ± 22 200-600 MHz: 100 ± 32