

GenSPEED® 10,000 Category 6a U/FTP (STP) 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'
- Made in U.S.A.

Applications

- IEEE 802.3an: 10G BASE-T (10 Gigabit Ethernet)
- 1000 BASE-TX (Gigabit Ethernet)
- 2.4/1.2 Gb/s ATM
- IEEE 802.3af for PoE
- IEEE 802.3at for PoE Plus

Standard Compliances

- ANSI/TIA 568-C.2
- 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: Foamed 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/1000 ft)	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.

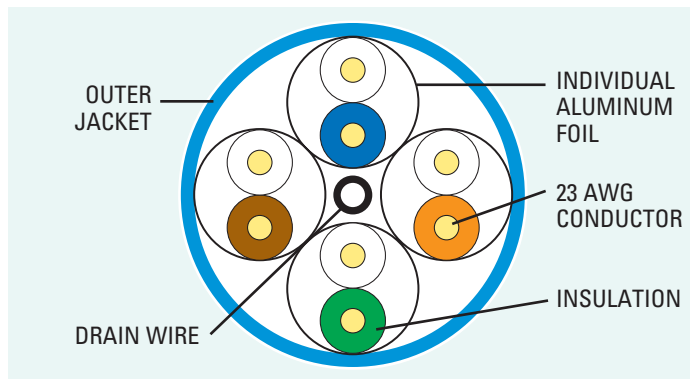
A Shielded 10 Gig Option for Peace of Mind

ELECTRICAL PERFORMANCE

Frequency MHz	PSACR* (min)	ACR* (min)	Insertion Loss (max)	PSNEXT (min)	NEXT (min)	PSACRF (min)	ACRF (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 100 m (328 ft.) length @ 20°C.
*PSACR & ACR not specified in ANSI/TIA 568-C.2

GenSPEED® 10,000 CATEGORY 6a U/FTP (STP) CROSS-SECTION



ELECTRICAL CHARACTERISTICS

DC Resistance (max) Ohms/100 m (328 ft) @ 20°C	8.9
DC Resistance Unbalance (max) Individual Pair %	4.0
Delay Skew (max) ns/100 m	35
Nom. Velocity of Propagation % Speed of Light	CMP: 78 CMR: 75
Characteristic Impedance Frequency (f): 1-600 MHz	Ohms 100 ± 15

GenSPEED® 10,000 Category 6A F/UTP (ScTP) Cable

Features And Benefits

- A shielded or foiled-twisted pair (F/UTP) cable, requiring grounding and providing industry-leading protection from external cable noise sources, also known as alien crosstalk (PSANEXT and PSAACRF)
- The internal separator optimizes internal pair geometry to yield superior electrical performance and maintain flexibility. This unique cross-web stabilizes each pair to create a smaller, **round** cable profile
- TRU-Mark® print legend contains footage markings from 1000' to 0'
- Made in U.S.A.

Applications

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

Standard Compliances

- ANSI/TIA 568-C.2
- 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



RoHS Compliant
Directive 2002/95/EC



CONSTRUCTION

Conductors

- 23 AWG solid bare annealed copper

Insulation

- Non-Plenum: Polyolefin
- Plenum: Fluoropolymer

Color Code

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

Separator

- Cross-Web

Jacket

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

Core Tape

- CMR: Polypropylene
- CMP: Fluoropolymer

Drain Wire

- 24 AWG stranded (7/32) solid tinned copper

Shield









- Polyester-backed aluminum foil (aluminum side in)

PHYSICAL DATA

	CMR (Non-Plenum)	CMP (Plenum)
Nominal Cable Diameter (in)	0.320	0.320
Nominal Cable Weight (lbs/1000 ft)	42	46
Minimum Bend Radius (in)	1.25	1.25
Maximum Pulling Force (lbs)	40	40
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	7133586	7131586
 White	7133587	7131587
 Yellow	7133588	7131588
 Gray	7133589	7131589
 Red	7133590	7131590
 Orange	7133591	7131591
 Green	7133592	7131592
 Purple	7133593	7131593

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

Data subject to change without notice.

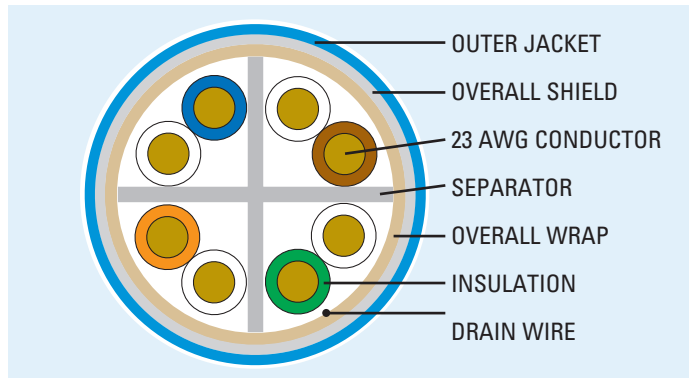
A Standards-Compliant Shielded Cable

ELECTRICAL PERFORMANCE

Frequency MHz	PSACR*	ACR*	Insertion Loss (min)	PSNEXT	NEXT	PSACRF	ACRF	Return Loss (min)	TCL (min)	PSANEXT		PSAACRF			
	(min)	(min)		(min)	(min)	(min)	(min)			(min)	(min)	(min)	(min)	(min)	(min)
	General Cable Guaranteed	General Cable Guaranteed	TIA 568-C.2	TIA 568-C.2	TIA 568-C.2	TIA 568-C.2	TIA 568-C.2	TIA 568-C.2	TIA 568-C.2	TIA 568-C.2	General Cable Guaranteed	General Cable Typical	TIA 568-C.2	General Cable Guaranteed	General Cable Typical
1	70.2	72.2	2.1	72.3	74.3	64.8	67.8	20.0	40.0	67.0	73.0	85.0	67.0	73.0	85.0
4	59.5	61.5	3.8	63.3	65.3	52.8	55.8	23.0	40.0	67.0	73.0	85.0	66.2	72.2	84.2
10	51.4	53.4	5.9	57.3	59.3	44.8	47.8	25.0	40.0	67.0	73.0	85.0	58.2	64.2	76.2
16	46.8	48.8	7.5	54.2	56.2	40.7	43.7	25.0	38.0	67.0	73.0	85.0	54.1	60.1	72.1
20	44.4	46.4	8.4	52.8	54.8	38.8	41.8	25.0	37.0	67.0	73.0	85.0	52.2	58.2	70.2
31.25	39.4	41.4	10.5	49.9	51.9	34.9	37.9	23.6	35.1	67.0	73.0	85.0	48.3	54.3	66.3
62.5	30.4	32.4	15.0	45.4	47.4	28.9	31.9	21.5	32.0	65.6	71.6	83.6	42.3	48.3	60.3
100	23.2	25.2	19.1	42.3	44.3	24.8	27.8	20.1	30.0	62.5	68.5	80.5	38.2	44.2	56.2
150	16.0	18.0	23.7	39.7	41.7	21.3	24.3	18.9	28.2	59.9	65.9	77.9	34.7	40.7	52.7
200	10.2	12.2	27.6	37.8	39.8	18.8	21.8	18.0	27.0	58.0	64.0	76.0	32.2	38.2	50.2
250	5.2	7.2	31.1	36.3	38.3	16.8	19.8	17.3	26.0	56.5	62.5	74.5	30.2	36.2	48.2
300	0.9	2.9	34.3	35.1	37.1	15.3	18.3	16.8	25.2	55.3	61.3	73.3	28.7	34.7	46.7
400	—	—	40.1	33.3	35.3	12.8	15.8	15.9	24.0	53.5	59.5	71.5	26.2	32.2	44.2
500	—	—	45.3	31.8	33.8	10.8	13.8	15.2	23.0	52.0	58.0	70.0	24.2	30.2	42.2

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20°C.
*PSACR & ACR not specified in ANSI/TIA 568-C.2

TYPICAL GenSPEED® 10,000 CATEGORY 6A F/UTP (ScTP) CROSS-SECTION



ELECTRICAL CHARACTERISTICS

DC Resistance (max) Ohms/100 m (328 ft) @ 20°C	8.9
DC Resistance Unbalanced (max) Individual Pair %	4
Delay Skew (max) ns/100 m	35
Nom. Velocity of Propagation % Speed of Light	70
Characteristic Impedance Frequency (f): 1-500 MHz	Ohms 100 ± 15