

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

An Enhanced Overall Shielded Cable



CONSTRUCTION

Conductors

- 23 AWG solid bare annealed copper

Insulation

- Non-Plenum: Thermoplastic
- Plenum: Fluoropolymer

Color Code

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

Separator

- Cross-Web

Core Tape

- Non-Plenum: Mylar
- Plenum: Mylar

Drain Wire

- 24 AWG solid tinned copper

Shield

- Polyester-backed aluminum foil (aluminum side in)

Jacket

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

PHYSICAL DATA

	CMP (Plenum)	CMR (Non-Plenum)
Nominal Cable Diameter (in)	0.260	0.265
Nominal Cable Weight (lbs/1000 ft)	33	40
Minimum Bend Radius (in)	2.5	2.5
Maximum Pulling Force (lbs)	40	40
Temperature Rating (°C)		
Installation:	0 to +60	0 to +60
Operation:	-20 to +105	-20 to +75

ELECTRICAL PERFORMANCE

Frequency MHz	Insertion Loss (min)	NEXT (min)	Return Loss (min)	PSANEXT (min)			PSAACRF (min)		
				TIA Guaranteed	TIA Guaranteed	General Cable Typical	TIA Guaranteed	General Cable Typical	General Cable Typical
1	2.1	74.3	20.0	67.0	73.0	85.0	67.0	73.0	85.0
4	3.8	65.3	23.0	67.0	73.0	85.0	66.2	72.2	84.2
10	5.9	59.3	25.0	67.0	73.0	85.0	58.2	64.2	76.2
16	7.5	56.2	25.0	67.0	73.0	85.0	54.1	60.1	72.1
20	8.4	54.8	25.0	67.0	73.0	85.0	52.2	58.2	70.2
31.25	10.5	51.9	23.6	67.0	73.0	85.0	48.3	54.3	66.3
62.5	15.0	47.4	21.5	65.6	71.6	83.6	42.3	48.3	60.3
100	19.1	44.3	20.1	62.5	68.5	80.5	38.2	44.2	56.2
150	23.7	41.7	18.9	59.9	65.9	77.9	34.7	40.7	52.7
200	27.6	39.8	18.0	58.0	64.0	76.0	32.2	38.2	50.2
250	31.1	38.3	17.3	56.5	62.5	74.5	30.2	36.2	48.2
300	34.3	37.1	16.8	55.3	61.3	73.3	28.7	34.7	46.7
400	40.1	35.3	15.9	53.5	59.5	71.5	26.2	32.2	44.2
500	45.3	33.8	15.2	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 568.2-D

PART NUMBERS

Standard packaging: 1000' Spool

Jacket Color	Spool		Jacket Color	Spool	
	CMP (Plenum)	CMR (Non- Plenum)		CMP (Plenum)	CMR (Non- Plenum)
Blue	7141586	7143586	Red	7141590	7143590
White	7141587	7143587	Orange	7141591	7143591
Yellow	7141588	7143588	Green	7141592	7143592
Gray	7141589	7143589	Purple	7141593	7143593

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

Data subject to change without notice.



Features and Benefits

- An overall 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)
- CMP 105C jacket rating provides consistent performance in a wide range of operating environments.
- UL Listed CMP-LP 0.7A with certified performance for high power PoE applications
- 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'

Applications

- IEEE 802.3: 10G BASE-T, 1000 BASE-T, 100 BASE-TX, 10 BASE-T, PoE, 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 CMR (UL 1666) for Non-Plenum
- NEC/CEC Type CMP (NFPA 262) for Plenum
- UL Listed CMR-LP (0.5A) for Non-Plenum*
- UL Listed CMP-LP (0.7A) for Plenum**
- UL 444
- RoHS Compliant Directive 2011/65/EU
- ANSI/TIA 862 (Building Automation)
- ICEA S-116-732
- ISO/IEC 11801 Ed. 2.0 (Class E_A)

*0.5A is the ampacity rating of the cable, which equates to 100 watts using 50 volts over four pairs.
**0.7A is the ampacity rating of the cable, which equates to 140 watts using 50 volts over four pairs.

ELECTRICAL CHARACTERISTICS

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

CROSS-SECTION

