

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

Standards-Compliant



CONSTRUCTION

Conductors

- 23 AWG solid bare annealed copper

Insulation

- Non-Plenum: Polyolefin
- Plenum: Fluoropolymer

Color Code

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

Separator

- Cross-web

Core Wrap

- Barrier tape

Shield

- Polyester-backed aluminum foil

Drain Wire

- 24 AWG stranded (7/32) tinned copper

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	0.298
Nominal Cable Weight (lbs/1000 ft)	40	50
Minimum Bend Radius (in)	2.25	2.50
Maximum Pulling Force (lbs)	40	40
Temperature Rating (°C)		
Installation:	0 to +60	0 to +60
Operation:	-20 to +75	-20 to +90

ELECTRICAL PERFORMANCE

Frequency MHz	Insertion Loss (max)	PSNEXT (min)	Return Loss (min)
1	2.0	72.3	20.0
4	3.8	63.3	23.0
10	6.0	57.3	25.0
16	7.6	54.2	25.0
20	8.5	52.8	25.0
31.25	10.7	49.9	23.6
62.5	15.4	45.4	21.5
100	19.8	42.3	20.1
150	24.7	39.7	18.9
200	29.0	37.8	18.0
250	32.8	36.3	17.3
350	39.8	34.1	16.3
400	43.0	33.3	15.9
500	48.9	31.8	15.2

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20°C. Results beyond 250 MHz are for reference only.
*PSACR & ACR not specified in ANSI/TIA 568-C.2

PART NUMBERS

Standard packaging: 1000' Spool

Jacket Color	Spool	
	CMR (Non-Plenum)	CMP (Plenum)
Blue	6133785	6131785
White	6133787	6131787

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

Data subject to change without notice.

Features and Benefits

- Foil shield reduces electromagnetic interference (EMI) for optimal performance
- Performance guaranteed to 250 MHz
- Improved cable temperature rating (90°C Plenum, 75°C Riser) for greater protection against increased operating temperatures and for high-wattage applications
- TRU-Mark® print legend contains footage markings from 1000' to 0'

Applications

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

Standard Compliances

- ANSI/TIA 568-C.2
- 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
- ICEA S-102-700
- ISO/IEC 11801 Ed. 2.0 (Class E)

*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

DC Resistance (max) Ohms/100 m (328 ft) @ 20°C	9.38
DC Resistance Unbalance (max) Individual Pair %	4.00
Delay Skew (max) ns/100 m	45
Nom. Velocity of Propagation % Speed of Light	70
Characteristic Impedance Frequency (f): 1-250 MHz	Ohms 100 ± 15

CROSS-SECTION

