GenSPEED® 6500 Premium Category 6 Cable
Signal Strength and Power

Features and Benefits
- Designed and engineered with precision balance to offer ultimate headroom
- High-end optimized performance to support the most bandwidth-intense applications
- New and improved separator construction allowing for more pair separation
- Performance guaranteed to 350 MHz
- TRU-Mark® print legend contains footage markings from 1000' to 0'
- Third-party verified for guaranteed performance
- Made in U.S.A.

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 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)

LISTED VERIFIED TIA 568-C.2

RoHS Compliant Directive 2011/65/EU

Made in U.S.A.

Data subject to change without notice.



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

Rip Cord
- Applied longitudinally under jacket

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

PHYSICAL DATA

	CMR (Non-Plenum)	CMP (Plenum)
Nominal Cable Diameter (in)	0.260	0.255
Nominal Cable Weight (lbs/1000 ft)	32	31
Minimum Bend Radius (in)	1.0	1.0
Maximum Pulling Force (lbs)	50	50
Temperature Rating (˚C)		
Installation:	0 to +60	0 to +60
Operation:	-20 to +75	-20 to +75

PART NUMBERS
Standard packaging: 1000' Spool-Pac®

	Spool-Pac®		Spool	
Jacket Color	CMR (Non-Plenum)	CMP (Plenum)	CMR (Non-Plenum)	CMP (Plenum)
Blue	**7133930**	**7131930**	**7133970**	**7131970**
White	**7133931**	**7131931**	**7133971**	**7131971**
Yellow	**7133932**	**7131932**	**7133972**	**7131972**
Gray	**7133933**	**7131933**	**7133973**	**7131973**
Red	**7133934**	**7131934**	**7133974**	**7131974**
Orange	**7133935**	**7131935**	**7133975**	**7131975**
Green	**7133936**	**7131936**	**7133976**	**7131976**
Black	**7133937**	**7131937**	**7133977**	**7131977**
Pink	**7133938**	**7131938**	**7133978**	**7131978**
Purple	**7133939**	**7131939**	**7133979**	**7131979**

Note: Bulk reels are available as a special request with a maximum allowable length of 3000 feet per reel. Minimum run and lead time may apply.

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

ELECTRICAL PERFORMANCE

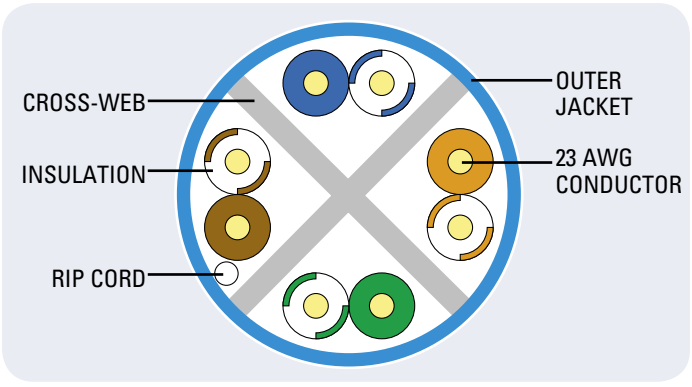
Frequency MHz	PSACR* (min)	ACR* (min)	Insertion Loss (max)		PSNEXT (min)		NEXT (min)	
	Guaranteed	Guaranteed	TIA 568-C.2	Guaranteed	TIA 568-C.2	Guaranteed	TIA 568-C.2	Guaranteed
1	77.4	79.4	2.0	1.9	72.3	79.3	74.3	81.3
4	66.8	68.8	3.8	3.5	63.3	70.3	65.3	72.3
10	58.8	60.8	6.0	5.5	57.3	64.3	59.3	66.3
16	54.2	56.2	7.6	7.0	54.2	61.2	56.2	63.2
20	51.9	53.9	8.5	7.8	52.8	59.8	54.8	61.8
31.25	47.0	49.0	10.7	9.9	49.9	56.9	51.9	58.9
62.5	38.0	40.0	15.4	14.3	45.4	52.4	47.4	54.4
100	30.8	32.8	19.8	18.5	42.3	49.3	44.3	51.3
200	17.5	19.5	29.0	27.2	37.8	44.8	39.8	46.8
250	12.4	14.4	32.8	30.9	36.3	43.3	38.3	45.3
350	3.5	5.5	—	37.6	—	41.1	—	43.1
500	—	—	—	46.5	—	38.8	—	40.8

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20˚C. Results beyond 350 MHz for reference only.
*PSACR & ACR not specified in ANSI/TIA 568-C.2

Frequency MHz	PSACRF (min)		ACRF (min)		Return Loss (min)		TCL (min)		ELTCTL (min)	
	TIA 568-C.2	Guaranteed	TIA 568-C.2	Guaranteed	TIA 568-C.2	Guaranteed	TIA 568-C.2	Guaranteed	TIA 568-C.2	Guaranteed
1	64.8	70.8	67.8	73.8	20.0	20.0	40.0	40.0	35.0	35.0
4	52.8	58.8	55.8	61.8	23.0	23.0	40.0	40.0	23.0	23.0
10	44.8	50.8	47.8	53.8	25.0	25.0	40.0	40.0	15.0	15.0
16	40.7	46.7	43.7	49.7	25.0	25.0	38.0	38.0	10.9	10.9
20	38.8	44.8	41.8	47.8	25.0	25.0	37.0	37.0	9.0	9.0
31.25	34.9	40.9	37.9	43.9	23.6	25.0	35.1	35.1	—	5.1
62.5	28.9	34.9	31.9	37.9	21.5	23.5	32.0	32.0	—	5.0
100	24.8	30.8	27.8	33.8	20.1	22.1	30.0	30.0	—	5.0
200	18.8	24.8	21.8	27.8	18.0	20.0	27.0	27.0	—	5.0
250	16.8	23.8	19.8	26.8	17.3	19.3	26.0	26.0	—	5.0
350	—	19.9	—	22.9	—	18.3	—	—	—	—
500	—	16.8	—	19.8	—	17.2	—	—	—	—

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20˚C. Results beyond 350 MHz for reference only.

GenSPEED® 6500 PREMIUM CATEGORY 6 CROSS-SECTION



ELECTRICAL CHARACTERISTICS

	Max.	Nom.
DC Resistance Ohms/100 m (328 ft) @ 20˚C	9.38	6.50
DC Resistance Unbalance Individual Pair %	4.00	< 1
Delay Skew ns/100 m	45	35
Nom. Velocity of Propagation % Speed of Light	CMP: 72 CMR: 70	
Characteristic Impedance Frequency (f): 1-500 MHz	Ohms 100 ± 15	