

GenSPEED® 10 UTP Gen4 Category 6A Cable



PART NUMBERS

Standard packaging: 1000' Lengths

Jacket Color		Spool	Pull-Pac®	Pull-Pac®
		CMR (Non-Plenum)	CMR (Non-Plenum)	CMP (Plenum)
	Blue	7143819	7143800	7141800
	White	7143820	7143801	7141801
	Yellow	7143822	7143802	7141802
	Gray	7143821	7143803	7141803
	Red	7143824	7143804	7141804
	Orange	7143826	7143805	7141805
	Green	7143823	7143806	7141806
	Black	7143828	7143807	7141807
	Pink	7143827	7143808	7141808
	Purple	7143825	7143809	7141809

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

PHYSICAL DATA

	CMR (Non-Plenum)	CMP (Plenum)
Nominal Cable Diameter (in)	0.260	0.250
Nominal Cable Weight (lbs/1000 ft)	32	32
Minimum Bend Radius (in)	1.0	1.0
Maximum Pulling Force (lbs)	40	40
Temperature Rating (°C)		
Installation:	0 to +60	0 to +60
Operation:	-20 to +75	-20 to +105



CONSTRUCTION:

Conductors

- 23 AWG solid bare annealed copper

Insulation

- Plenum: Fluoropolymer
- Non-Plenum: Thermoplastic

Color Code

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

Separator

- Cross-Web

Jacket

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

Features and Benefits

- Smaller cable diameter allows for greater cable density, reducing cable management costs.
- Simplified design and improved bend radius make it easier to strip, terminate and route, reducing installation time and expense.
- CMP 105°C 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.
- UL Listed CMR-LP 0.5A with certified performance for high power PoE applications.
- CMP - UL verified with certified performance for 100W power over HDBaseT.
- Innovative cross-web separator with patented design provides superior internal electrical characteristics by locking the pairs into a systematic orientation within the cable.
- Streamlined design allows for 36 reels per pallet, improving distribution and warehousing efficiency.
- TRU-MARK® print legend contains footage markings from 1000' to 0'.
- All GenSPEED products are Made in the U.S.A.

Applications

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

Standard Compliances

- ANSI/TIA 568.2-E
- NEC/CEC Type CMP (NFPA 262) for Plenum
- NEC/CEC Type CMR (UL 1666) for Riser
- UL Listed CMP-LP 0.7A*
- UL Listed CMR-LP 0.5A**
- UL 444
- UL 4299
- RoHS Compliant Directive 2011/65/EU
- ANSI/TIA 862 (Building Automation)
- ICEA S-116-732
- ISO/IEC 11801 Ed. 2.0 (Class E_A)

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

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

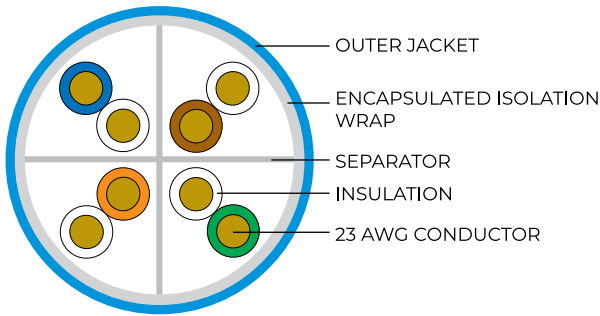
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ELECTRICAL PERFORMANCE

Frequency MHz	PSACR** (min)	ACR** (min)	Insertion Loss (max)	PSNEXT (min)	NEXT (min)	PSACRF (min)	ACRF (min)	Return Loss (min)	TCL (min)	PSANEXT (min)		PSAACRF (min)	
	PG Guaranteed	PG Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	TIA Guaranteed	PG Guaranteed	TIA Guaranteed	PG Guaranteed
1	70.2	72.2	2.1	72.3	74.3	64.8	67.8	20.0	40.0	67.0	69.0	67.0	69.0
4	59.5	61.5	3.8	63.3	65.3	52.8	55.8	23.0	40.0	67.0	69.0	66.2	68.2
10	51.4	53.4	5.9	57.3	59.3	44.8	47.8	25.0	40.0	67.0	69.0	58.2	60.2
16	46.8	48.8	7.5	54.2	56.2	40.7	43.7	25.0	38.0	67.0	69.0	54.1	56.1
20	44.4	46.4	8.4	52.8	54.8	38.8	41.8	25.0	37.0	67.0	69.0	52.2	54.2
31.25	39.4	41.4	10.5	49.9	51.9	34.9	37.9	23.6	35.1	67.0	69.0	48.3	50.3
62.5	30.4	32.4	15.0	45.4	47.4	28.9	31.9	21.5	32.0	65.6	67.6	42.3	44.3
100	23.2	25.2	19.1	42.3	44.3	24.8	27.8	20.1	30.0	62.5	64.5	38.2	40.2
150	16.0	18.0	23.7	39.7	41.7	21.3	24.3	18.9	28.2	59.9	61.9	34.7	36.7
200	10.2	12.2	27.6	37.8	39.8	18.8	21.8	18.0	27.0	58.0	60.0	32.2	34.2
250	5.2	7.2	31.1	36.3	38.3	16.8	19.8	17.3	26.0	56.5	58.5	30.2	32.2
300	0.9	2.9	34.3	35.1	37.1	15.3	18.3	16.8	25.2	55.3	57.3	28.7	30.7
400	—	—	40.1	33.3	35.3	12.8	15.8	15.9	24.0	53.5	55.5	26.2	28.2
500	—	—	45.3	31.8	33.8	10.8	13.8	15.2	23.0	52.0	54.0	24.2	26.2
600*	—	—	50.1*	30.6*	32.6*	9.2*	12.2*	14.7*	22.2*	—	50.8*	—	22.6*
700*	—	—	54.5*	29.6*	31.6*	7.9*	10.9*	14.2*	21.5*	—	49.8*	—	21.3*
750*	—	—	56.7*	29.2*	31.2*	7.3*	10.3*	14.0*	21.2*	—	49.4*	—	20.7*

Note: Values are expressed in dB per 100 m (328 ft.) length @ 20 °C.
* Values are for reference only.
** PSACR & ACR not specified in ANSI/TIA 568.2-E

CROSS-SECTION



ELECTRICAL CHARACTERISTICS

	Max.	Nom.
DC Resistance Ohms/100 m (328 ft) @ 20 °C	9.38	7.50
DC Resistance Unbalanced Individual Pair %	4.00	< 1
Delay Skew (Max) ns/100 m	45	
Nom. Velocity of Propagation % Speed of Light	CMP: 70 CMR: 68	
Characteristic Impedance Frequency (f): 1-500 MHz	Ohms 100 ± 15	