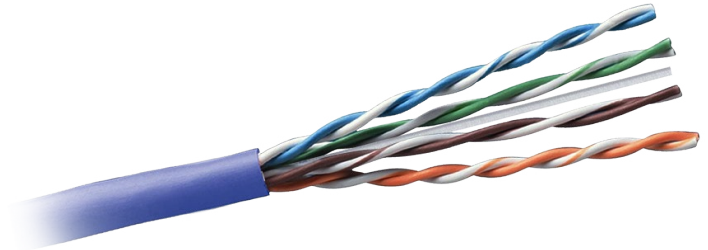


Specifications

Category 6 Unscreened Cable

KEY FEATURES

- ANSI/TIA 568-C.2 category 6 verified
- Complies with ISO/IEC 11801 2nd Ed. category 6
- UL listed CMP, CMR, CM & LSZH
- Reach & RoHS 2 compliant
- Supports PoE up to 100 Watts



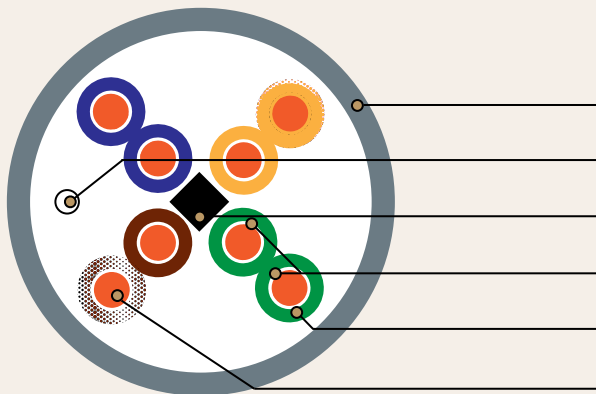
ORDERING INFORMATION

PART NO.	DESCRIPTION
BC6-2111B-CC	Category 6 Premium U/UTP 4 pair 23 AWG solid cable w/ pair separator, CMP, 1,000 ft (305 m), USA Made
BC6-2110B-CC	Category 6 U/UTP 4 pair 23 AWG solid cable, CMP, 1,000 ft (305 m), USA Made
BC6-2110A-CC	Category 6 U/UTP 4 pair 23 AWG solid cable, CMP, 1,000 ft (305 m), Intl. Made
BC6-2120A-CC	Category 6 U/UTP 4 pair 23 AWG solid cable, CMR, 1,000 ft (305 m), Intl. Made
BC6-2140A-CC	Category 6 U/UTP 4 pair 23 AWG solid cable, CM, 1,000 ft (305 m), Intl. Made
BC6-2160A-GY	Category 6 U/UTP 4 pair 23 AWG solid cable, LSZH, 1,000 ft (305 m), Gray, Intl. Made

Specify cable jacket color by substituting **CC** in P/N for the following: WH BU

For other cable jacket colors, contact customer service.

CABLE CONSTRUCTION DETAIL



BC6-2110 & 2111

OUTER JACKET

RIP CORD

PAIR SEPARATOR (BC6-2111B ONLY)

TWISTED PAIR

INSULATION

SOLID CONDUCTOR

Product Specifications

Category 6 Unscreened Cable



SPECIFICATIONS

ELECTRICAL

Maximum Delay Skew: 45 ns/100 m
Input Impedance: 100±15 Ohm (1-250 MHz)

CONSTRUCTION

Conductor Size: 23 AWG
Conductor Material: Solid bare copper
Pair Count: 4 Pairs
Plastic Materials:
Plenum: CMP rated flame-retardant thermoplastic
Riser: CMR rated flame-retardant thermoplastic
Riser: CM rated flame-retardant thermoplastic
Riser: LSZH rated flame-retardant thermoplastic

ENVIRONMENTAL

Temperature:
Installation: 0°C to 60°C (32°F to 140°F)
Storage: -40°C to 60°C (-40°F to 140°F)
Operating: -20°C to 75°C (-4°F to 167°F)

APPLICATIONS

Ethernet: IEEE 802.3u (100 Mbps), IEEE 802.3ab (1 Gbps), IEEE 802.3bz (2.5/5 Gbps); ATM: 622 Mbps, 1000 Mbps; PoE: IEEE 802.3af (15 W), IEEE 802.3at (30 W +), IEEE 802.3bt Type 3 (60 W ++), IEEE 802.3bt Type 4 (100 W ++)

Overall Cable Diameter: 0.2 in (5.1 mm)
Packaging: 1,000 ft (305 m)

TRANSMISSION PERFORMANCE

FREQUENCY (MHz)	INSERTION LOSS, dB		NEXT LOSS, dB		PSNEXT LOSS, dB		RETURN LOSS		ACRF, dB		PSACRF, dB		ACR, dB		PSACR, dB	
	TIA ¹	MAX ²	TIA ¹	MIN ²	TIA ¹	MIN ²	TIA ¹	MIN ²	TIA ¹	MIN ²	TIA ¹	MIN ²	CALC ³	MIN ²	CALC ⁴	MIN ²
1	2.0	2.0	74.3	74.3	72.3	72.3	20.0	20.0	67.8	67.8	64.8	64.8	72.3	72.3	70.3	70.3
4	3.8	3.8	65.3	65.3	63.3	63.3	23.0	23.0	55.8	55.8	52.8	52.8	61.5	61.5	59.5	59.5
8	5.3	5.3	60.8	60.8	58.8	58.8	24.5	24.5	49.7	49.7	46.7	46.7	55.4	55.4	53.4	53.4
10	6.0	6.0	59.3	59.3	57.3	57.3	25.0	25.0	47.8	47.8	44.8	44.8	53.3	53.3	51.3	51.3
16	7.6	7.6	56.2	56.2	54.2	54.2	25.0	25.0	43.7	43.7	40.7	40.7	48.7	48.7	46.7	46.7
31.25	10.7	10.7	51.9	51.9	49.9	49.9	23.6	23.6	37.9	37.9	34.9	34.9	41.2	41.2	39.2	39.2
62.5	15.4	15.4	47.4	47.4	45.4	45.4	21.5	21.5	31.9	31.9	28.9	28.9	32.0	32.0	30.0	30.0
100	19.8	19.8	44.3	44.3	42.3	42.3	20.1	20.1	27.8	27.8	24.8	24.8	24.5	24.5	22.5	22.5
200	29.0	29.0	39.8	39.8	37.8	37.8	18.0	18.0	21.8	21.8	18.8	18.8	10.8	10.8	8.8	8.8
250	32.8	32.8	38.3	38.3	36.3	36.3	17.3	17.3	19.8	19.8	16.8	16.8	5.5	5.5	3.5	3.5

CATEGORY 6 PREMIUM (BC6-2111) ONLY

FREQUENCY (MHz)	INSERTION LOSS, dB		NEXT LOSS, dB		PSNEXT LOSS, dB		RETURN LOSS		ACRF, dB		PSACRF, dB		ACR, dB		PSACR, dB	
	TIA ¹	MAX ²	TIA ¹	MIN ²	TIA ¹	MIN ²	TIA ¹	MIN ²	TIA ¹	MIN ²	TIA ¹	MIN ²	CALC ³	MIN ²	CALC ⁴	MIN ²
1	2.0	2.0	74.3	77.1	72.3	75.1	20.0	20.0	67.8	70.2	64.8	67.2	72.3	75.1	70.3	73.1
4	3.8	3.8	65.3	68.2	63.3	65.9	23.0	23.0	55.8	58.3	52.8	55.3	61.5	64.2	59.5	62.2
8	5.3	5.3	60.8	63.5	58.8	61.3	24.5	24.5	49.7	52.1	46.7	49.5	55.4	58.2	53.4	56.1
10	6.0	6.0	59.3	62.1	57.3	59.9	25.0	25.0	47.8	50.2	44.8	47.2	53.3	56.1	51.3	54.1
16	7.6	7.6	56.2	58.9	54.2	56.9	25.0	25.0	43.7	46.3	40.7	43.1	48.7	51.2	46.7	49.4
31.25	10.7	10.7	51.9	54.5	49.9	52.4	23.6	23.6	37.9	40.3	34.9	37.3	41.2	39.9	39.2	39.9
62.5	15.4	15.4	47.4	50.1	45.4	48.1	21.5	21.5	31.9	34.5	28.9	31.4	32.0	34.8	30.0	32.8
100	19.8	19.8	44.3	46.9	42.3	44.9	20.1	20.1	27.8	30.4	24.8	27.2	24.5	27.2	22.5	25.3
200	29.0	29.0	39.8	42.3	37.8	40.4	18.0	18.0	21.8	24.2	18.8	21.5	10.8	13.5	8.8	11.4
250	32.8	32.8	38.3	41.0	36.3	39.1	17.3	17.3	19.8	22.3	16.8	19.3	5.5	8.2	3.5	6.2

- 1: ANSI/TIA-568-C.2 horizontal cable transmission performance limits
- 2: SIGNAMAX guaranteed performance
- 3: Calculated, ACR=NEXT-IL
- 4: Calculated, PSACR=PSNEXT-IL

KEEPING YOUR WORLD CONNECTED