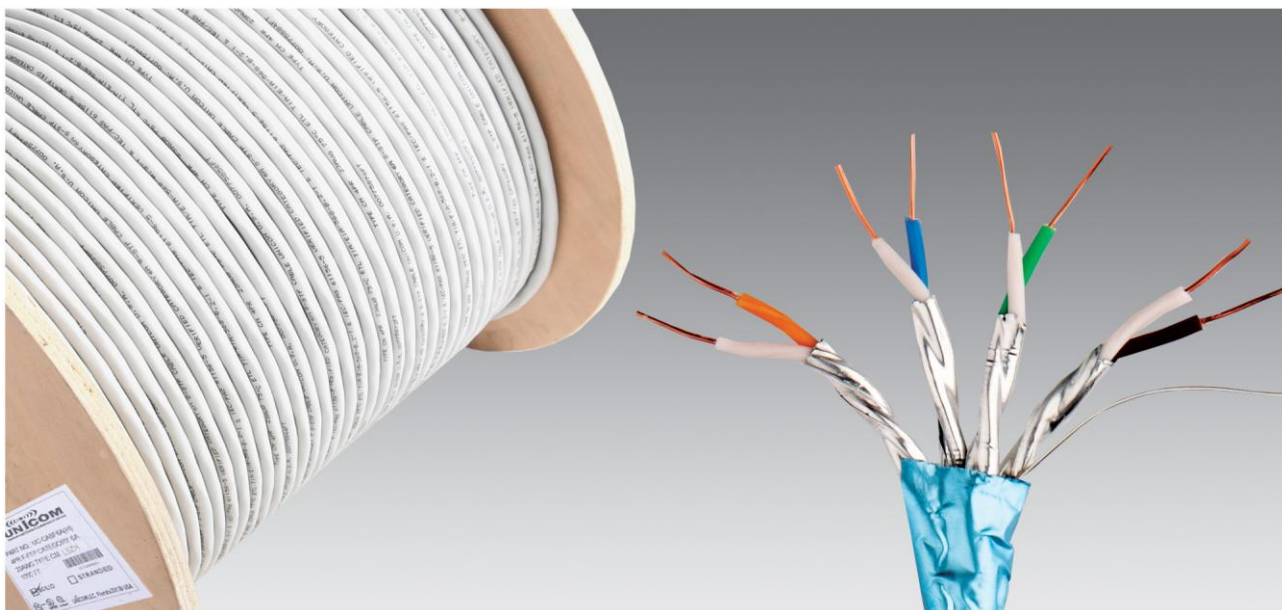


Category 6A Cable [UC-CABx6A]



Description

UNICOM's CABx6A cable provides the market with a cost effective, high-bandwidth and high performance cabling. As next generation cable, it is capable of meeting the demanding requirements for 10 gigabit Ethernet (10GBASE-T). This breakthrough cable technology has been specifically designed to reduce "alien-crosstalk" and its effect on 10GBASE-T networks. Alien crosstalk is the coupling interference that comes from nearby cables or other electrical devices. Alien crosstalk has been defined by IEEE as the dominant noise source that will affect 10GBASE-T performance.

This cable is designed for applications up to 500 MHz and provides transmission performance meeting Category 6A specifications and is a good choice for supporting applications requiring high bandwidth such as: data centers, server farms, storage area networks, and campus backbones.

Features

- Capable of supporting 10GBASE-T networks & handling the next generation network applications
- Power sum characterization gives highest performance using existing applications
- Provides additional bandwidth required for future applications
- Capable of handling Multimedia, broadband and baseband video signals

Applications

- IEEE 802.3: 10GBase-T, 1000Base-T (Gigabit Ethernet), 100Base-TX (Fast Ethernet), 10Base-T
- 2.4/1.2 Gbps ATM
- 4/16 Mbps Token Ring
- ANSI X3.263: 100 Mbps
- 3D imaging, Broadband & Baseband analog video
- Digital Video

Standard Compliances

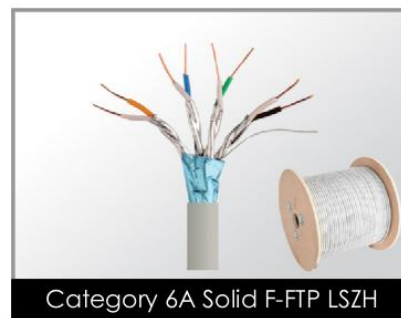
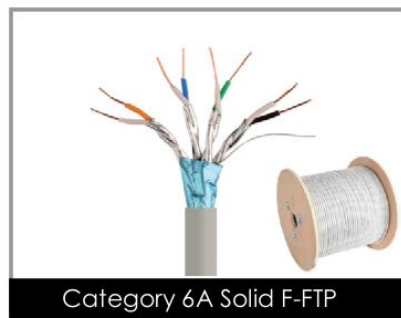
- Category 6A
- TIA/EIA-568-B.2-10
- ANSI/TIA-568-C
- ISO/IEC 11801

Technical Characteristics

- Conductor resistance ($\Omega/100m$ @ 20°C): 6.85
- DC resistance unbalance (%): 5
- Mutual Capacitance (pF/m): 58 (5.8nF/100m)
- Pair-to-ground capacitance unbalance (pF/100m): 330

- Delay Skew (ns/100m): 25
- Insertion Loss (dB/100m): $1.82 * \sqrt{f} + 0.091 * f + 0.25/\sqrt{f}$
- Input Impedance (Ω): $100 \pm 10, 15, 22\%$

Frequency (MHz)	Ins. Loss (dB/100m) Max.	RL (dB) Min.	Pair to Pair		Power Sum				Po. Delay (ns/100)
			NEXT	ELFEXT	NEXT	ELFEXT	ANEXT	AELFEXT	
			(dB/100m)		(dB/100m)				
			Min.	Min.	Min.	Min.	Min.	Min.	
1	2.1	20.0	76.3	71.8	74.3	69.8	75.0	75.0	570
4	3.8	23.0	67.3	59.8	65.3	57.8	75.0	66.2	543
10	6.0	25.0	61.3	51.8	59.3	49.8	72.5	58.2	538
16	7.6	25.0	58.2	47.7	56.2	45.7	70.5	54.1	536
20	8.5	25.0	56.8	45.8	54.8	43.8	69.5	52.2	536
31.25	10.8	23.6	53.9	41.9	51.9	39.9	67.6	48.3	535
62.5	15.5	21.5	49.4	35.9	47.4	33.9	64.5	42.3	535
100	19.9	20.1	46.3	31.8	44.3	29.8	62.5	38.2	534
155	25.3	18.8	43.4	28.0	41.4	26.0	59.6	34.4	534
200	29.2	18.0	41.8	25.8	39.8	23.8	58.0	32.2	534
250	33.0	17.3	40.3	23.8	38.3	21.8	56.5	30.2	534
300	36.6	16.8	39.1	22.3	37.1	20.3	55.3	28.7	534
350	40.0	16.3	38.1	20.9	36.1	18.9	54.3	27.3	534
400	43.2	15.9	37.3	19.8	35.3	17.8	53.5	26.2	534
450	46.3	15.5	36.5	18.7	34.5	16.7	52.7	25.1	534
500	49.2	15.2	35.8	17.8	33.8	15.8	52.0	24.2	534



Ordering code*	Description
UC-CABU6A	Category 6A Solid UTP Cable
UC-CABF6A	Category 6A Solid F-FTP Cable
UC-CABU6A(H)	Category 6A Solid UTP LSZH Cable
UC-CABF6A(H)	Category 6A Solid F-FTP LSZH Cable