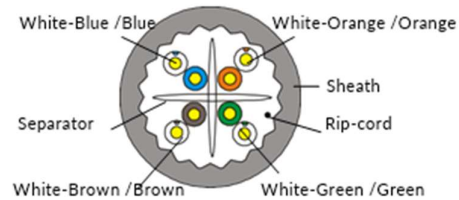


## Category Cable, CAT6A U/UTP Unshielded

### Product Description

Alpha CAT6A 4-pair U/UTP copper cable forms the foundation of 10 Gigabit Ethernet networks. The cable exceeds Category 6A performance ensuring reliability in delivering 10G network speed and high data throughput.



The category 6A solid cables (U/UTP) has been designed for indoor/outdoor applications fully supporting the more demanding office and industrial communications requirements including voice, data, VoIP, Video Conferencing, security, IP based cameras and other demanding real-time applications. The cable covers the category 6A requirements for unshielded twisted pair cables of 100  $\Omega$  and is characterized up to 500 MHz suitable for transmitting data over local area networks (LANs).

### Product Highlights

- Category 6A/Class EA compliant
- Unshielded pairs individually twisted
- Compliant to ISO/IEC 11801 Ed 2.0, ANSI/TIA-568.2-D, EN 50173-1, IEC 61156-5, EN 50288-6-1 IEC 60332-1-2, IEC 60754-2, IEC 61034-2
- Reliable performance
- Super-standard performance margin



### Standards

- UL444
- ANSI/TIA-568.2-D
- ISO/IEC 11801:2011 (Ed 2.2) Class EA
- IEC 61156-5
- CENELEC EN 50173-1:2011
- EN 50288-10-1

### Applications

- Horizontal Distribution and Backbone Cabling
- 4/16 Mbps Token Ring (IEEE 802.5)
- 10/100/1000/10G BASE-T (IEEE 802.3)
- 155/622 Mbps 1.2Gb ATM
- 100 Mbps TP-PMD
- Analogue Voice, ISDN, ADSL
- HVAC alarm systems and other signaling

### Environmental Information

Temperature range	Value
Operation	-20°C to +75° C

### Technical Information

Mechanical data	Value
Dimensions (W x D x H)	See technical drawing
Material	Conductor material - Solid bare copper Conductor insulation - Skin Foam PE Cable jacket - PE/PVC/LSZH
Conductor diameter	23 AWG
Insulated conductor diameter	1.02± 0.05 mm
Outer cable diameter	7.1 ±0.4 mm
Jacket thickness	0.70mm ± 0.05 mm
Pulling strength	110N
Minimum bend-radius	8 times outer diameter
<b>Fire rating</b>	
PVC jacket	IEC60332-1-2
LSZH jacket	IEC 60332-1-2, IEC 60754-1,2 & IEC 61034-2

**Electrical Information**

Frequency (MHZ)	RL (≥dB)	ATT 20°C (≤dB)	NEXT (≥dB)	PS NEXT (≥dB)	ELFEXT (≥dB)	PSELFEXT (≥dB)	PSANEXT (≥dB)	PSAELFEXT (≥dB)
1	20.0	1.9	74.3	72.3	68.0	65.0	67.0	67.0
4	23.0	3.8	65.3	63.3	56.0	53.0	67.0	66.2
8	24.5	5.3	60.8	58.8	49.9	46.9	67.0	60.1
10	25.0	5.9	59.3	57.3	48.0	45.0	67.0	58.2
16	25.0	7.5	56.2	54.2	43.8	40.9	67.0	54.1
20	25.0	8.4	54.8	52.8	42.0	39.0	67.0	52.2
25	24.3	9.4	53.3	51.3	40.0	37.0	67.0	50.2
31.25	23.6	10.5	51.9	49.9	38.1	35.1	67.0	48.3
62.5	21.5	15.0	47.4	45.4	32.1	29.1	65.6	42.3
100	20.1	19.1	44.3	42.3	28.0	25.0	62.5	38.2
200	18.0	27.6	39.8	37.8	22.0	19.0	58.8	32.2
250	17.3	31.1	38.3	36.3	20.0	17.0	56.5	30.2

Electrical characteristics	Value
DC resistance max	9.38 Ohm/100m
DC resistance unbalance	Max 5%
Mutual capacitance	Max 5.6 nF/100m
Capacitance unbalance pair	Max 330pF/100m
Impedance 1-250 MHz	100 ± 15Ω
Propagation delay	Max. 534 ns/100m@ 500 MHz
Dielectric strength	DC KV/sec. 2.5/2
Propagation delay skew	Max 45 ns/100m
Insulation resistance - MΩ/km	Min.5000
Nominal velocity of propagation	76%

**Ordering Information**

Part Number	Description
SCCC6AUUTPLLG	Cat 6A 10G Cable, U/UTP, 23 AWG, LSZH, Grey-Indoor Plenum Rated
SCCC6AUUTPVLG	Cat 6A 10G Cable, U/UTP, 23 AWG, PVC, Grey
SCCC6AUUTPPBK	Cat 6A 10G Cable, U/UTP, 23 AWG, PE, Black-Outdoor Rated