

CAT.6A U/FTP 23AWG CABLE

COPPER SYSTEMS CABLE

NETCON Category 6A U/FTP cables are specifically designed to deliver robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 meters.

Each Category 6A U/FTP exceed the minimum specified performance for Category 6A U/FTP cables and support all CLASS EA applications.

APPLICATION

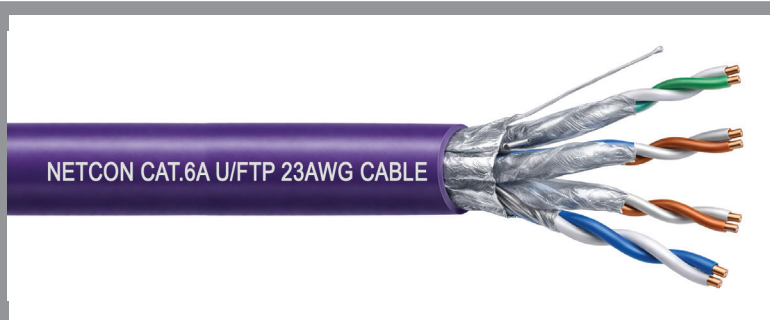
- Supports category 6A (Class EA) networks running up to 500MHz applications
- Ideal for environments where external interferences can disrupt signals
- Horizontal and backbone in structured cabling installations

FEATURES

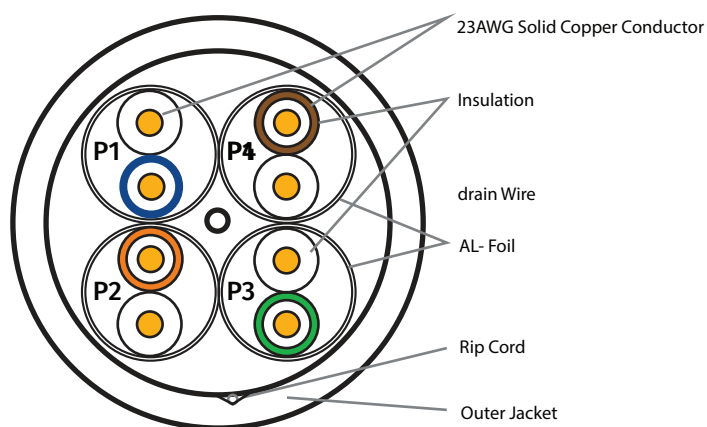
- Conform to IEC, EIA-TIA performance requirements
- 23AWG premium grade copper conductor
- U/FTP cable structure for better shielding in heavy external interference environments
- Support application with PoE, IEEE 802.3bt PoE++ Type 4

SPECIFICATIONS

Parameters	Value
Electrical Performance	Certified performance in a 4-conductor configuration up to 100 mtrs.
Conductor/Insulator	23 AWG solid copper insulated with HPDE
Operating Temperature	-20°C ~ +75°C
PoE Application	IEEE 802.3bt PoE++ Type 4
Compliance	ANSI/TIA-568-C.2, ISO 11801, IEC 60603-7
RoHS Compliance	Compliant



CAT.6A U/FTP 23AWG CABLE



CORE IDENTIFICATION

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

CABLE CONSTRUCTION

Parameters	Units	Value	
Cable Jacket Type		LSZH/PVC/PE	CPR B2ca (s1a,d1,a1)
Cable OD mm	mm	7.2mm±0.2mm	7.5mm±0.2mm
Shielding		U/FTP, an aluminized polyester tape applied with a 15% minimum overlap at each pair, the drain wire is attached to the AL.	
Insulation		Skin-foam-skin PE	
Pair Color Codes		Pair 1: White, and Blue Pair 2: White, and Orange Pair 3: White, and Green Pair 4: White, and Brown	
Sheath Color		Blue (RAL 5015) Grey (RAL 7044) Black (RAL 9005) White (RAL 1013)	
Conductor		23AWG Solid Copperfoil	

MECHANICAL SPECIFICATIONS

Parameters	Value
Bulk Cable Weight	55 Kg/Km
Max. Pull Tension	100N
Min. Bend Radius (installation)	8 x OD.
Min. Bend Radius (installed)	4 x OD.
Cold Bend	No crack @-20 x 4hrs
Storage Temperature	-20°C ~ +70°C
Operation Temperature	-20°C ~ +75°C
Installation Temperature	0 to +50

ELECTRICAL SPECIFICATIONS
(Electrical Properties @20°C)

Parameters	Value	
Characteristic Impedance	(1-100MHz) (100-250MHz) (250-500MHz)	100 ±15Ω 100 ±18Ω 100 ±25Ω
DC Resistance	Ω/100m	≤ 9.35Ω/100m max.
Resistance Unbalance	%	≤ 2%
Capacitance Unbalance to Earth	Pf/km	≤ 330 pF/km
Delay Skew	ns/100m	≤ 40ns/100m
Nominal Velocity of Propagation	%	68%
Propagation Delay (Nominal)	ns/100m	533ns/100m at 500MHz
Test Voltage (d.c. for 1 minute) Conductor /Conductor	VDC	1000V
Insulation Resistance (500V d.c)	MΩ	≥ 500MΩ/KM
Max. Operating Voltage	V	80V

**TRANSMISSION LINE
PERFORMANCE AT 20°C**

Freq. MHz	RL ≥dB	ATT ≤dB	NEXT ≥dB	PHASE DELAY ≤ns	PSNEXT ≥dBsum	ELFEXT ≥dB	PSELFEXT ≥dB
1	20	2	74.5	570	72.3	68	65
4	23	3.7	65.3	552	63.3	56	53
10	25	5.9	59.3	545	57.3	48	45
20	25	8.3	54.8	541.2	52.8	42	39
62.5	21.5	14.9	47.4	538.5	45.4	32.1	29.1
100	20	19	44.3	537.6	42.3	28	25
250	17.3	31	38.2	536.1	36.5	20	17
500	15.2	45.4	33.7	532	31.8	14	11
600*	17.3	50.1	60.7	535.5	57.7	38.4	35.4
800*	17.3	58.92	58.9	535.3	55.9	35.9	32.9

ORDERING INFORMATION

NTC6AUF23L	Netcon, Category 6A, U/FTP, 500MHz installation cable, Solid Copper, 23 AWG, 305 Metre Box, LSZH jacket, Purple
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