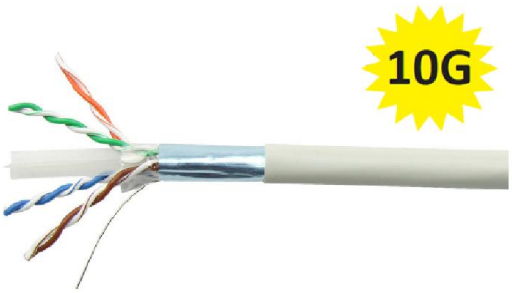
Category 6A F/UTP 4 Pair Cable

Category 6A F/UTP cables exceed Category 6A/Class EA specification. It is tested to 500MHz frequency range and designed to support 10 Gigabyte applications to full 100m.

Data integrity is one of the most essential network requirements for many corporations, especially those located in environments that are prone to noise and electromagnetic interference such as industrial facilities and airports, as well as those running critical systems such as military installations and hospitals. F/UTP (Twisted Pair – overall Foil shield) cabling systems are installed for improved Alien Cross talk performance.



Complied with or exceeds Standard:

- ISO/IEC-11801, 2nd Edition Class EA
- ANSI/TIA-568-C.2:2009 Category 6A
- LSZH: IEC 60332-1, IEC 60754, IEC 61034
- IEC 61156-5:2002 Category 6A
- IEEE 802.3an :2006 (10GBASE-T)

Features & Benefits:

- UL & 3P certified
- 4 twisted-pair cable
- For 10 Gigabit ether net applications
- 23AWG insulated copper conducts
- All cables meet or exceed the requirement proposed by TIA /EIA 568 B .2 ,ISO/IEC 11801 Category 6A
- Twisted pairs are brightly colored and distinguished at a glance
- Striped cross frameworks to match corresponding pairs
- Ultra smooth jacket easy to pull in tight spaces

MATERIAL CONSTRUCTION & DESIGN:

Conductor Material:	Bare Copper
Conductor Size:	23 AWG
Conductor Diameter:	0.58 mm norm.
Conductor Construction:	Solid
Insulation Material:	High Density PE
Insulation Diameter:	1.43 ±0.06 mm
Conductor Unit Identification:	Solid/Stripe
Color Code:	Per TIA/EIA 568-B
Screening Material:	Aluminium Foil
Screening Design:	100% Coverage
Conductor Unit Lay-Up:	Pairs

Overall Drain-Wire Material:	Tinned Copper, 0.10mm
Overall Drain-Wire Construction:	Solid
Total Number of Wires:	8
Rip Cord:	optional
Outer Jacket Material:	PVC or LSZH
Outer Jacket Thickness & Ex. Diameter:	7.5 mm
Outer Jacket Color:	Per Requirement **(The default is grey)**
Marking:	Per Requirement

ELECTRICAL, MECHANICAL & TRANSMISSION CHARACTERISTICS

Frequency Range:	1 - 500 MHz
Characteristic Impedance:	100 Ω±6
Coupling Attenuation:	55 dB min @ 30-100 MHz 55-20Log(f/100) @100-500 MHz
Max. DC Resistance :	72 Ω/km@20°C
Max. Resistance Unbalance:	2 %
Capacitance Unbalance:	1.2 pF/m max.
Velocity of Propagation:	78 % nom.
Propagation Delay Skew:	25 ns/100m max.
Dielectric Strength:	1.5KV/minute
Dielectric Strength to Shield:	1.5KV/minute
Min. Insulation Resistance :	5 GΩ•km
Min. Bend Radius:	55 mm
Max. Operating Temperature:	+70 °C
Min. Operating Temperature:	-20 °C
Max. Tensile Strength - Short Term:	130 N
Transfer Impedance	50 mΩ/m max @ 1 MHz 100 mΩ/m max @ 10 MHz 200 mΩ/m max @ 30 MHz 1000 mΩ/m max @ 100 MHz

ELECTRICAL PERFORMANCE CHARACTERISTICS

Cat. 6A screened Pair Horizontal Cables*						
Frequency (MHz)	Attenuation (dB/100m@ 20°C)	NEXT (dB)	PS NEXT (dB)	Return Loss (dB)	ELFEXT (dB)	PSELFEXT (dB)
1.0	1.8	96	92	29	92	85
4.0	3.3	89	83	32	80	73
10.0	5.2	83	77	36	72	65
16.0	6.7	80	74	36	68	61
20.0	7.5	79	73	36	68	59
31.25	9.4	76	70	34	62	55
62.5	13.7	71	65	34	56	49
100.0	17.8	68	62	33	52	45
*Supplied cables meet the minimum Cat. 6A transmission requirements as per IEC 61156-5 Ed. 2						

ORDERING INFORMATION

PART NUMBER	DESCRIPTION	LENGTH
C6a-3-X	Category 6a F/UTP 4 Pair Cable PVC	305 m
C6a-4-X	Category 6a F/UTP 4 Pair cable LSZH	305 m

X: BK(Black), BL(Blue), GN(Green), GY(Gray), RD(Red), WH(White), YL(Yellow)

PACKING INFORMATION

Cable Length (Meter)	Packing Mode	N.W (kg)	G.W (kg)	Dimension (cm)
305	Ply Reel	17.2	19.0	34.0 x 34.0 x 34.0
1000	Ply Reel	56.3	63.0	57.0 x 57.0 x 33.0