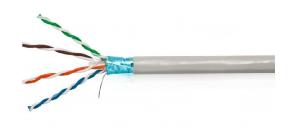
## Sales Catalog of HNK Telecommunication Products

## **Copper Structured Cabling and Accessories**

# Category 6 F/UTP 4 Pair Cable

Category 6 F/UTP cables exceed Category 6/Class E specification. It is tested to 250MHz frequency range and designed to support Gigabit 1000Base-T and 1000Base-Tx applications to full 100m. Category 6 F/UTP cables are UL listed CM, CMX, CMR & CMP and standard packing will be 305m easy pull out boxes.

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 E(Category 6)
- IEC 61156-7:2003
- IEEE 802.af, IEEE 802.3at for PoE applications

#### Features & Benefits:

- UL & 3P certified
  4 twisted-pair cable
  For Gigabit ether net and up to 2.5Gbit/s applications
- 23AWG insulated copper conducts with PVC jacket
- All cables meet or exceed the requirement proposed by TIA /EIA 568 B .2 ,ISO/IEC 11801 Category 6
- · 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

IEC 61156-5:2002 Category 6

ANSI/TIA-568-C.2:2009 Category 6

LSZH: IEC 60332-1, IEC 60754, IEC 61034

Conductor Material:	Bare Copper		
Conductor Size:	0.57mm±0.022mm (D), 23 AWG		
Conductor Construction:	Solid		
Insulation Material:	High Density PE		
Insulation Diameter:	1.43 mm nom.		
Conductor Unit Identification:	Solid/Stripe		
Color Code:	Per TIA/EIA 568-B		

#### **MATERIAL CONSTRUCTION & DESIGN:**

Total Number of Wires:	8
Rip Cord:	Yes
Drain Wire:	Tinned Copper 0.41mm
Overall Shield :	Laminated Aluminium foil (foil face in) ,100%
Outer Jacket:	LS0H Halogen free flame retardant or PVC
Outer Jacket Thickness & Ex. Diameter:	0.60±0.05mm, 7.4±0.4mm
Outer Jacket Color:	Per Requirement(The default is grey)
Marking:	Per Requirement

## **ELECTRICAL, MECHANICAL & TRANSMISSION CHARACTERISTICS**

Frequency Range:	1 - 250 MHz				
Impedance:	100 Ω+/-15				
Coupling Attenuation:	55 dB min @ 30-100 MHz 55-20Log(f/100)				
	@100-250 MHz				
Max. DC Resistance :	73 Ω/km nom.				
Max. Resistance Unbalance:	4 %				
Capacitance:	5.6nF/100m max.				
Capacitance Unbalance:	3.3 pF/m max.				
Velocity of Propagation:	69%				
Propagation Delay Skew:	35ns/10m max.				
Dielectric Strength:	1KV/minute				
Min. Insulation Resistance :	5 GΩ•km				
Max. Tensile Strength - Short Term:	110 N				
Min. Bend Radius:	80 mm				
Max. Operating Temperature:	+70 °C				
Min. Operating Temperature:	–20 °C				
Transfer Impedance	10 mΩ/m max @ 1-10 MHz 30 mΩ/m max @ 30				
Transfer Impedance	MHz				

### **ELECTRICAL PERFORMANCE CHARACTERISTICS**

Cat. 6 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	2.0	79.3	80.3	25.0	77.8	73.8
4.0	3.7	70.3	71.3	28.0	65.8	61.8
10.0	5.8	64.3	65.3	34.0	57.8	53.8
16.0	7.4	61.2	62.2	30.0	53.7	49.7
20.0	8.2	59.8	60.8	30.0	51.8	47.8
31.25	10.4	56.9	57.9	28.0	44.9	43.9
62.5	15.0	52.4	53.4	28.0	41.9	37.9
100.0	19.3	49.3	50.3	28.0	37.8	33.8
*Supplied cables meet the minimum Cat. 6 transmission requirements as per IEC 61156-5 Ed. 2						

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#### **ORDERING INFORMATION**

PART NUMBER	DESCRIPTION		LENGTH
C6-3-X	Category 6 F/UTP	4 Pair cable PVC	305 m
C6-4-X	Category 6 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	Pulley Box	14.5	16.0	35.0 x 35.0 x 22.0
1000	Ply Reel	47.3	54.0	47.0 x 47.0 x 42.0