

# **CATEGORY 6** U/UTP 4 PAIR EXTERNAL CABLE

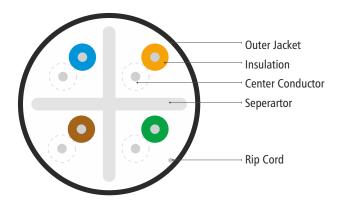


### **PRODUCT OVERVIEW**

Accell Category 6 UTP cables exceed Category 6 / Class E specification. It is tested to 250 MHz frequency range and designed to support Gigabit 1000Base-T and 1000Base-Tx applications upto 100m.

Extremely high pair-balance providing excellent EMC (Electro Magnetic Compatibility), minimizing radiation, maximizing noise immunity and providing high alien cross talk performance to UTP (Unshielded Twisted Pair) cabling systems. These external cables are ideal for industrial use and in direct sunlight.

## **CABLE DESIGN**



## **COMPLIANCE**

IEEE 802.af,IEEE 802.3at for PoE applications ANSI/TIA-568-C.2 Category 6 ISO/IEC-11801, Class E IEC 61156-5: Category 6

### **MATERIAL CONSTRUCTION & DESIGN**

**Conductor Material** Bare Copper **Conductor Size** 23 AWG **Conductor Construction** Solid

High Density PE Insulation Material Insulation Diameter 1.02 mm **Conductor Unit Identification** Solid/Stripe Colour Code Per TIA/EIA 568-B

**Total Number of Wires** 8 Rip Cord **Outer Jacket** 

Outer Jacket Thickness & Ex. Diameter  $0.55\pm0.05$  mm,  $6.3\pm0.4$  mm **Outer Jacket Colour** Black or Per Requirement Marking Per Requirement



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### **ELECTRICAL & MECHANICAL CHARACTERISTICS**

Frequency Range 1 - 250 MHz Impedance  $100 \Omega \pm 15$ 

Coupling Attenuation 40 dB min @ 30-100 MHz 40-20 Log (f/100) @100-300 MHz

DC Resistance 73  $\Omega$ /km norm.

Max. Resistance Unbalance 4 %

Capacitance 5.6 nF/100m max.
Capacitance Unbalance 3.3 pF/m max.
Propagation Delay Skew 35 ns/100m max.

Velocity of Propagation 69 % Dielectric Strength 1 KV/minute Min. Insulation Resistance 5 G $\Omega$  • km Max.Tensile Strength - Short Term 110 N Min. Bend Radius 53.6 mm Operating Temperature Range -10 °C +65 °C

### TRANSMISSION PERFORMANCE

Cat. 6 Un-screened Pair Horizontal Cables\*

Freq. MHz	Attenuation dB/100m @ 20°C	NEXT dB	PSNEXT dB	RL dB	ELFEXT dB	PSELFEXT dB
1	1.9	87.6	82.6	28.0	85.0	80.0
4	3.5	79.2	74.2	30.0	73.0	68.0
10	5.6	73.3	68.3	29.0	65.0	60.2
20	8.4	69.1	63.8	29.0	59.0	54.0
31.25	10.0	66.0	61.1	28.6	55.1	50.3
100	18.9	58.0	53.0	25.1	45.0	40.1
150	24.0	55.2	50.7	23.8	41.8	36.9
200	26.1	53.0	48.0	22.8	39.0	33.8
250	30.0	52.6	47.6	22.0	37.8	32.8

<sup>\*\*</sup>Supplied cables meets Cat. 6 min. transmission requirements as per IEC 61156-5 Ed. 2

### **ORDERING INFORMATION**

Part Number	Description	Standard Length
ADC221304X	Category 6 U/UTP 23 AWG 4 Pair External Cable PE	305 mtr
X: BK(Black)		

## **PACKING INFORMATION**

Part Number	Packing Mode	N.W (kg)	G.W (kg)	Dimension (mm)
ADC221304X	Pulley Box	19.1	20.0	380 x 380 x 260