



Technical Specification for U/UTP CAT 5E- UL CMP

1. Construction and Materials

1.1 Conductor

- Material: Solid Bare Copper
- Size: 24AWG/ 0.0193" / 0.49 ± 0.005 mm

1.2 Pairs

4 Pairs

1.3 Insulation

- Thickness: 0.034" / 0.87 ± 0.05 mm FEP
- Material: FEP
- Colors: Blue-White/Blue, Orange-White/Orange, Green-White/Green, Brown-White/Brown

1.4 Spline/Cross Separator

FEP or LSZH CROSSWEB

1.5 Rip Cord

Kevlar

1.6 Outer Jacket

- Material: Plenum PVC
- Wall Thickness: 0.0157" Nom(0.4mm)
- Outer Diameter (OD): 0.1811 ± 0.008 " (4.6 ± 0.2 mm)

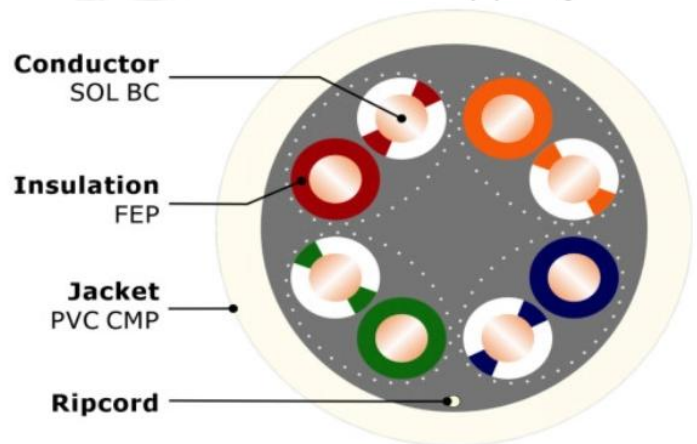
2. Standards Compliance

UL 444 & CSA C22.2 No.214 Communications Cables

3. Application Support

- 1000BASE-T, 1000BASE-TX, 100BASE-T, 100BASE-TX, 100VG-AnyLAN, ATM
- VoIP, ISDN, Token, 100MTPPDM, Analog and Data video, POE Type1,2,3,4

4. Electrical Characteristics

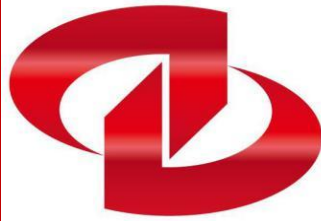




Parameter	Specification
DC Resistance	< 9.38 Ohms/100m @20 °C
DC Resistance Unbalance	5% @ 20°C
Mutual Capacitance	5.6 nF/100m
Characteristic Impedance	1 - 100 MHz : 100±15 Ohms; 101 - 250 MHz : 100±22 Ohms; 251 - 500 MHz : 100±25 Ohms
Max Frequency	100MHz
Capacitance Unbalance	330 pF/100m
NVP (Nominal Velocity of Propagation)	≥ 65%
Delay Skew	≤ 44ns/100m
Working Voltage	Typically up to 48V
Rated Voltage (V RMS)	300V

5. Transmission Performance (100m, 20±2°C)

Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)	ACRF (dB)	PS.NEXT (dB)	PS.ACRF (dB)	RL (dB)	Delay (ns/100m)	Skew (ns/100m)
1	2.0	65.3	63.8	62.3	60.8	20.0	570.0	45.0
4	4.1	56.3	51.8	53.3	48.8	23.0	552.0	
8	5.8	51.8	45.7	48.8	42.7	24.5	546.7	
10	6.5	50.3	43.8	47.3	40.8	25.0	545.4	
16	8.2	47.2	39.7	44.2	36.7	25.0	543.0	
20	9.3	45.8	37.8	42.8	34.8	25.0	542.0	
25	10.4	44.3	35.8	41.3	32.8	24.3	541.2	
31.25	11.7	42.9	33.9	39.9	30.9	23.6	540.4	



62.5	17.0	38.4	27.9	35.4	24.9	21.5	538.6
100	22.0	35.3	23.8	32.3	20.8	20.1	537.6

6. Physical Properties

Parameter	Specification
Pulling Tension (Max)	25 lbs(110N)
Bend Radius (Min)	4 Times the cable diameter
Operating Temperature	-20 to 75 °C (-4 to 167 °F)

7. Customization Options

- Jacket Color: Customized based on RAL Classic
- Printing: Customized printing words on jacket
- Packing & Label: Customized spool, carton & label design