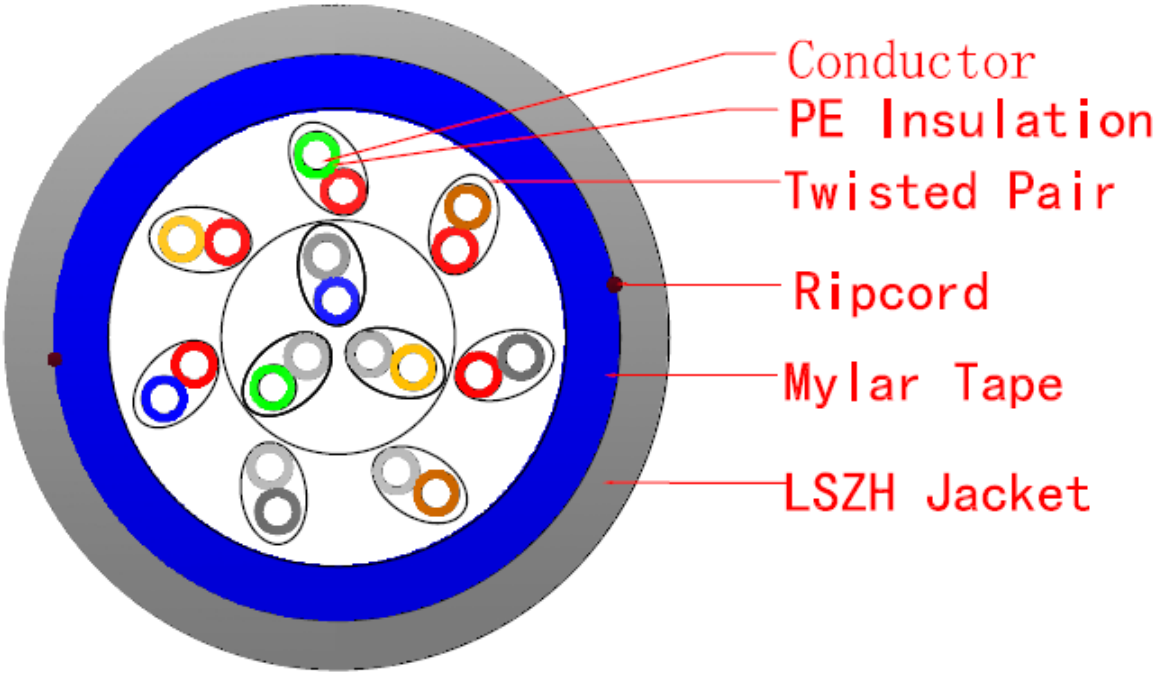
U/UTP CAT3 Indoor Cable Technical Specification

U/UTP CAT3 BC/PE / LSZH 10/25/50/100pairs 0.5mm



Cable Construction

1. Conductor : pure annealed copper
   Diameter of wire : 0.50mm
   Tolerance : ± 0.01 mm
2. Insulation : PE Polyethylene
   Diameter of Insulation : 0.89mm
   Tolerance : ± 0.02 mm
   Nominal thickness : 0.195mm
3 Twisting pair : 2 x Insulated wire

Number of pairs		1	2	3	4	5	6	7	8	9	10
Insulation color coding	a	white	white	white	white	white	red	red	red	red	red
	b	blue	orange	green	brown	gray	blue	orange	green	brown	gray
Number of pairs		11	12	13	14	15	16	17	18	19	20
Insulation color coding	a	Black	Black	Black	Black	Black	Yellow	Yellow	Yellow	Yellow	Yellow
	b	blue	orange	green	brown	gray	blue	orange	green	brown	gray
Number of pairs		21	22	23	24	25					
Insulation color coding	a	Violet	Violet	Violet	Violet	Violet					
	b	blue	orange	green	brown	gray					

4 Cable Make-up : 2x（12+13）Pairs shall be form a 50-pairs supper unit。
: 4x25 Pairs shall be form a 100-pairs supper unit。

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NO.of Pairs in cable	Make-up			NO.of Pairs in spare per unit	NO.of unusable pairs allowed
	NO. of unite in centre and successive layers				
	centre	1st Layer	2st Layer		
10/0.50	2+8	----	----	0	0
25/0.50	2+8+15			0	0
50/0.50	2 x(12+13)	----	----	0	0
100/0.50	4 x 25	----	----	0	0

5 Colour of tape lappings within unit or a double or quadruple unit for cables

Unit		Colour of tape lappings for supper Unit		
NO.of unit	Colour of tape lappings	NO.of supper Unit		NO.of pairs
		100pairs	50 pairs	
1	White-blue	1	1	1~25
2	White-orange			26~50
3	White-green		2	51~75
4	White-brown			76~100

6. Core Wrapping : The cable core shall be wrapped with a continous protective layer of one or two tapes ,lapped Helically or laid longitudinally.

7. Rip Cord : Nylon Yarn

8. Outer Sheath : LSZH (Gray Colour RAL7035)

Cable size	Nominal Thickness （mm）	Min. Thickness at any point（mm）	Outer Diameter (Approx.) （mm）
10/0.50	1.20	1.02	8.7
25/0.50	1.40	1.19	12.6
50/0.50	1.40	1.19	16.7
100/0.50	1.60	1.36	22.8

9. Sheath Marking : According to the customer request

10. Packing and Weight :

Cable size	Drum material	Drum Length KM	Wooden drum size	Net. Weight Kg/drum(Approx.)	Gross.Weight Kg/drum(Approx.)
10/0.50	Wood drum	3.000	1000×500×480	280	340
25/0.50		2.000	1200×500×480	391	471
50/0.50		1.500	1200×500×630	509	594
100/0.50		2.000	1500×700×940	1251	1421

Electrical Characteristic

1. Max.DC Resistance at 20℃(Ω/km) ： 93.8
2. Min. Insulation DC Resistance (MΩ.km) ： 5000
3. Dielectric Strength Between Conductor DC (KV/1min) ： 1.0

4. Conductor Resistance Max. Unbalance 20℃ % ： 5
5. Max.Pair Mutual Capacitance at 1Mhz (nF/100m) ： 6.6
6. Max.Pair to Ground Capacitance Unblance (nF/100m) ： 160
7. Characteristic Impedance Form 4 to 100Mhz (Ohms) ： 100±15
8. Transmission characteristics/100m

Frequare	IL	NEXT	ELFEXT	RL
MHZ	≤dB	≥dB	≥dB	≥dB
4	5.6	32.3	27.0	12.0
8	8.5	27.8	20.9	12.0
10	9.7	26.3	19	12.0
16	13.1	23.2	14.9	10.0

MECHANICAL AND THERMAL PROPERTIES

Temperature range during operation (fixed state) : -20°C ~ +70°C

Temperature range during installation (mobile state) : -20°C ~ +50°C

Minimum bending radius : 15 x Overall Diameter