



*UTP Solid Cable CAT. 5E, 24 AWG, 4 Pairs, CM
for external use, reel of 305 meters*

Description:

Extended frequency to 100 MHz, 4 x 24 AWG - UTP PE Cable. Backward-compatibility with all CAT. 5E Products an application. Guarantee full-duplex and crosstalk values. RoHS compliant Solid bare copper

SPECIFICATIONS:

CABLE DESCRIPTION	
1 - CONDUCTOR	
Size	24 AWG
Type	Solid Bare Copper
Diameter (mm)	0,49 ± 0,01
2 - INSULATION	
Type	PE
Diameter (mm)	0,86 ± 0,05
Min. Thickness (mm)	0,15
3 - PAIRS	
Color Code	
Pair 1	Blue/White - blue strip
Pair 2	Orange/White - Orange Strip
Pair 3	Green/White - green strip
Pair 4	Brown/White - brown stripe
4 - JACKET	
Type	PVC
Overall Diameter (mm)	4,98 ± 0,3

TECHNICAL DATA - PHYSICAL		
1. Color bend Test	-20 ± 2°C X 4hrs no. Crack	
2. Dielectric Strenght	AC 1,2KV/min.	
3. Insulation	Before Aging	After Aging
Min Tension strength (psi)	2400	75% before aging (100°C x 48hrs)
Min elongation (%)	300	75% before aging (100°C x 48hrs)
4. Jacket		
Min Tension strength (psi)	1400	75% before aging (100°C x 48hrs)
Min elongation (%)	350	75% before aging (100°C x 48hrs)
5. Min bending Radius (mm)	40	
6. Max. Pulling tension	25	
7. Installation temperature	-10°C to + 60°C	
8 Operating temperature	-10°C to + 60°C	

TECHNICAL DATA - ELECTRICAL			
1. Conductor resistance (Ω/100m @ 20°C)	Max.	9,5	
2. DC resistance unbalance (%)	Max.	4	
3. Pair to ground capacitance unbalance (pF/km)	Max.	1600	
4. Delay skew (ns/100m)	Max.	45	4 ≤ f ≤ 100MHz
5. Insertion loss (dB/100m)	Max.	1,967 *√f + 0,023 * 0,1/√f	1 ≤ f ≤ 100MHz
6. Pair to Pair NEXT (dB/100m)	Min.	65,3 - 15 * log (f)	1 ≤ f ≤ 100MHz
7. PowerSum pr-pr NEXT (dB/100m)	Min.	62,3 - 15 * log (f)	1 ≤ f ≤ 100MHz
8. ELFEXT (dB/100m)	Min.	64 - 20* log (f)	1 ≤ f ≤ 100MHz
9. PowerSum ELFEXT (dB/100m)	Min.	61 - 20 * log (f)	1 ≤ f ≤ 100MHz
10. Return Loss (dB)	Min.	20 + 5 * log (f)	1 ≤ f ≤ 10MHz
		25	10 ≤ f < 20MHz
		25 - 7 * log (f / 20)	20 ≤ f ≤ 100MHz
11. Propagation Delay (ns/100m)	Max.	534 + 36/√f	1 ≤ f ≤ 100MHz
12. Input Impedance (Ω)		100 ± 15%	1 ≤ f ≤ 100MHz

IEC 61156-5 ed 2.0 CATEGORY 5E horizontal cable parameters

Freq. (MHz)	Ins. Loss (dB/100m)	RL (dB)	Pair to Pair		Power Sum		Po. Delay (ns/100)
			NEXT	ELFEXT	NEXT	ELFEXT	
			(dB/100m)		(dB/100m)		
	Max.	Min.	Min.	Min.	Min.	Min.	Max.
1	2,1	20,0	65,3	64,0	62,3	61,0	570,0
4	4,1	23,0	56,3	52,0	53,3	49,0	552,0
10	6,5	25,0	50,3	44,0	47,3	41,0	545,4
16	8,3	25,0	47,2	39,9	44,2	36,9	543,0
20	9,3	25,0	45,8	38,0	42,8	35,0	542,0
31.25	11,7	23,6	42,9	34,1	39,9	31,1	540,4
62.5	17,0	21,5	38,4	28,1	35,4	25,1	538,6
100	22,0	20,1	35,3	24,0	32,3	21,0	537,6

Features:

Standards:

- International: IEC 61156-5 edit 2.0

Certifications:

