



*UTP Solid Cable CAT. 6, 23 AWG, 4 Pairs,
for external use, reel of 305 meters*

Description:

Extended frequency to 250 MHz, 4 x 23 AWG - UTP PE Cable. Backward-compatibility with all CAT. 5E Products and application. Guarantee full-duplex and crosstalk values. RoHS compliant Solid bare copper conductors insulated with polyolefin.

SPECIFICATIONS:

CABLE DESCRIPTION	
1 - CONDUCTOR	
Size	23 AWG
Type	Solid Bare Copper
Diameter (mm)	0,55 ± 0,01
2 - INSULATION	
Type	PE
Diameter (mm)	0,973 ± 0,05
Min. Thickness (mm)	0,186
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 - brwon stripe
4- CENTRAL ELEMENT	
Type	PE cross separator
5 - JACKET	
Type	PVC
Overall Diameter (mm)	6,1 ± 0,3

TECHNICAL DATA - PHYSICAL		
1. Color bend Test	-20 ± 2°C X 4hrs no. Crack	
2. Dielectric Strenght	AC 1,7 Kvfor 2S	
3. Insulation	Before Aging	After Aging
Min Tension strenght (psi)	2400	75% before aging (100°C x 48hrs)
Min elongation (%)	300	75% before aging (100°C x 48hrs)
4. Jacket		
Min Tension strenght (psi)	1400	75% before aging (100°C x 48hrs)
Min elongation (%)	350	75% before aging (100°C x 48hrs)
5. Min bending Radius (mm)	50	
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. Delayskew (ns/100m)	Max.	45	4 ≤ f ≤ 250MHz
5. Insertion loss (dB/100m)	Max.	1,82 * √f + 0,0169 * 0,1/√f	1 ≤ f ≤ 250MHz
6. Pair to Pair NEXT (dB/100m)	Min.	65,3 - 15 * log (f)	1 ≤ f ≤ 250MHz
7. PowerSum pr-pr NEXT (dB/100m)	Min.	62,3 - 15 * log (f)	1 ≤ f ≤ 250MHz
8. ELFEXT (dB/100m)	Min.	64 - 20 * log (f)	1 ≤ f ≤ 250MHz
9. PowerSum ELFEXT (dB/100m)	Min.	61 - 20 * log (f)	1 ≤ f ≤ 250MHz
10. Return Loss (dB)	Min.	20 + 5 * log (f)	1 ≤ f < 10MHz
		25	10 ≤ f < 20MHz
		25 - 7 * log (f / 20)	20 ≤ f ≤ 250MHz
11. Propagation Delay (ns/100m)	Max.	534 + 36/√f	1 ≤ f ≤ 250MHz
12. Input Impedance (Ω)		100 ± 15%	1 ≤ f ≤ 100MHz
		100 ± 22%	100 < f ≤ 250MHz

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	75,0	68,0	72,3	65,0	570,0
4	3,8	23	66,3	56,0	63,3	53,0	552,0
10	6,0	25	60,3	48,0	57,3	45,0	545,4
16	7,6	25	57,2	43,9	54,2	40,9	543,0
20	8,5	25	55,8	42,0	52,8	39,0	542,0
31.25	10,7	23,6	52,9	38,1	49,9	35,1	540,4
62.5	15,5	21,5	48,4	32,1	45,4	29,1	538,6
100	19,9	20,1	45,3	28,0	42,3	25,0	537,6
200	29,1	18,0	40,8	22,0	37,8	19,0	536,5
250	33,0	17,3	39,9	20,0	36,3	17,0	536,3

Features:

Standards:

- International: IEC 61156-5 edit 2.0
- TIA-568-C.2 CAT 6

Certifications:

