

EUROLAN Copper cable

C6 U/UTP



Ordering information

Part number	E-number	Description
19D-U6-25WT-B305	4903283	EuroLAN C6 4 pair U/UTP LSZH Dca 305m/box
19D-U6-25WT-T500	4903285	EuroLAN C6 4 pair U/UTP LSZH Dca 500m/reel

Construction

Conductor	Bare copper wire Ø 0,55 mm (AWG23)	
Insulation	High Density Polyethylene, Ø 0,98 ± 0,05 mm	
Twisting	2 cores to the pair	
Cable lay up	1x4 pairs to the core, non-metallic cross separator (spline), rip-cord	
Sheath outer Ø	Ø 6,1 ± 0,4 mm - LSZH (RoHS compliant)	

Mechanical Properties

Bending radius	Without load	≥ 4 x OD
	With load	≥ 8 x OD
Temperature range	Installation temperature	-30°C to +50°C

DoP

Documentno	2018-307	
Certification date	2018-03-28	
Notified body	Force Technology	
Declared performance	Reaction to Fire: Dca-s2,d2,a1	

✓ Verified for high-speed applications up to 250 MHz (1Gbit Ethernet)

✓ **Application:**
Primary (campus), Secondary (riser), Tertiary (horizontal)
IEEE 802.3:
10/100/1000/10000 BaseT
IEEE 802.5 16MB; ISDN;
FDDI; ATM Power over Ethernet (PoE)/ PoE+

✓ **Standards:**
ISO/IEC 11801; TIA568-C.2

✓ **Fire rating:**
EN 50575:2014 including amendment A1:2016
EN 60332-1-2:2004 incl. Am A1:2015 and A11-2016
EN 50399:2011 incl. Am A1:2016
EN 60754-2:2014
EN 13501-6:2014
Class Dca-S2,d2,a1

EUROLAN Copper cable

C6 U/UTP

Electrical Properties		
Sheat Physical Properties	Before aging	Tensile Strenght (Mpa) $\geq 10,0$ Elongation (%) ≥ 125
	Aging period ($^{\circ}\text{C}\times\text{hrs}$)	100 $^{\circ}\text{C}\times 24\text{h}\times 7\text{d}$
	After aging	Tensile Strenght (Mpa) $\geq 8,0$ Elongation (%) ≥ 100
	Cold bend	(-20 $\pm 2^{\circ}\text{C}\times 4\text{h}$) 8xCable O.D. no visible cracks
Electrical Characteristics (20 $^{\circ}\text{C}$)	1-250 MHz	Impedance (Ω) 100 ± 15
	1-250 MHz	Delay skew (ns/100m) ≤ 45
	DC resistance ($\Omega/100\text{m}$) max	9,38
	DC conductor Resistance Unbalance (%)	Max 5,0
Nominal velocity propagation (NVP)	69%	

Electrical Data (nominal) acc. to C6 _A (at 20 $^{\circ}\text{C}$)							
F	Return loss	Attenuation	NEXT	PHASE	PS-NEXT	ELFEXT	PS-ELFEXT
(MHz)	(dB)	(dB/100m)	(dB)	$\leq \text{ns}$	(dB)	(dB/100m)	(dB/100m)
1,0	20	2,03	74,3	570,00	72,3	67,8	64,8
4,0	23	3,78	65,3	552,00	63,3	55,8	52,8
8,0	24,5	5,32	60,8	546,73	58,8	49,7	46,7
10,0	25	5,95	59,3	545,38	57,3	47,8	44,8
16,0	25	7,55	56,2	543,00	54,2	43,7	40,7
20,0	25	8,47	54,8	542,05	52,8	41,8	38,8
25,0	24,3	9,51	53,3	541,20	51,3	39,8	36,8
31,25	23,6	10,67	51,9	540,44	49,9	37,9	34,9
62,5	21,5	15,38	47,7	538,55	45,4	31,9	28,9
100,0	20,1	19,80	44,3	537,60	42,3	27,8	24,8
200,0	18,0	28,98	39,8	536,54	37,8	21,8	18,8
250,0	17,3	32,85	38,3	536,27	36,3	19,8	16,8