

EUROLAN Copper cable

C6 U/UTP Slimline



Ordering information

Part number	E-number	Description
19C-U6-25WT-B305	4938593	Eurolan C6 4 pair U/UTP LSZH Slimline 305m/box
19C-U6-25WT-T500	4939305	Eurolan C6 4 pair U/UTP LSZH Slimline 500m/reel

Construction

Conductor	Bare copper wire Ø 0,54 mm (AWG23)
Insulation	Solid Polyethylene, Ø 0.95 mm nom
Twisting	2 cores to the pair
Cable lay up	1x4 pairs to the core, non-metallic cross separator (spline)
Sheath	Ø 5,30 mm - LSZH
Fire load	316 MJ/km; 0,087 kWh/m
Weight kg/km	36
Copper content	18,1
Tensile force N	100

Mechanical Properties

Bending radius	Without load	≥ 4 x OD
	With load	≥ 8 x OD
Temperature range	During operation	-20°C to + 60°C
	During installation	0°C to + 50°C

✓ 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:**
EIA/TIA 568-C.2
ISO/IEC 11801 2nd ed; IEC 61156-5
EN 50173; EN 50288-6-1
IEEE 802.3at

✓ **Fire rating:**
EN 50399: Class Eca
LSZH: IEC 60332-1; IEC 60754-2;
IEC 61034

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Electrical Properties (at 20°C +/- 5°C)

DC loop resistance		≤ 176 Ω/km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 5000 MΩxkm
Capacitance	At 800 Hz	Nom. 48 nF/km
Capacitance unbalance	(pair to ground)	≤ 1500 pF/km
Nominal velocity propagation (NVP)		Approx. 67%
Mean impedance 100MHz		100+/- 5Ω
Propagation delay		≤ Nominal 535 ns/100 m
Delay skew		≤ 20 ns/100 m
Test voltage	(DC, 1 min) Core/Core	1000 V

Electrical Data (nominal) acc. to C6 (at 20°C)

F	Attenuation		NEXT		PS-NEXT		ACR		PS-ACR		ELFEXT		PS-ELFEXT		Return loss	
(MHz)	(dB/100m)		(dB)		(dB)		(dB/100m)		(dB/100m)		(dB/100m)		(dB/100m)		(dB)	
	Max	Nom	Min	Nom	Min	Nom	Min	Nom	Min	Nom	Min	Nom	Min	Nom	Min	Nom
1,0	2,1	1,9	74,0	78,0	72,0	75,0	72,0	76,1	70,0	73,1	68,0	82,0	65,0	80,0	20,0	22,0
4,0	3,8	3,8	65,0	69,0	63,0	66,0	61,2	65,2	59,2	62,2	56,0	70,0	53,0	68,0	23,0	25,0
10,0	6,0	6,0	59,0	63,0	57,0	60,0	53,0	57,0	51,0	54,0	48,0	62,0	45,0	60,0	25,0	27,0
16,0	7,6	7,6	56,0	60,0	54,0	57,0	48,4	52,3	46,4	49,3	44,0	58,0	41,0	56,0	25,0	27,0
20,0	8,5	8,5	55,0	59,0	53,0	56,0	46,5	50,0	44,5	47,0	42,0	56,0	39,0	54,0	25,0	27,0
31,2	10,7	10,7	52,0	56,0	50,0	53,0	41,3	45,0	39,3	42,0	38,0	52,0	35,0	50,0	23,6	26,0
62,5	15,5	15,1	47,0	51,0	45,0	48,0	31,5	36,0	29,5	33,0	32,0	46,0	29,0	44,0	21,5	24,0
100,0	19,9	19,1	44,0	48,0	42,0	45,0	24,1	28,9	22,1	25,9	28,0	42,0	25,0	40,0	20,1	23,0
125,0	22,5	21,3	43,0	47,0	41,0	44,0	20,5	25,2	18,5	22,2	26,0	40,0	23,0	38,0	19,5	22,0
155,5	25,4	23,8	42,0	45,0	40,0	42,0	16,6	21,3	14,6	18,3	24,0	38,0	21,0	36,0	18,8	21,0
175,0	27,1	25,3	41,0	44,0	39,0	41,0	13,9	19,1	11,9	16,1	23,0	37,0	20,0	35,0	18,4	21,0
200,0	29,2	27,0	40,0	44,0	38,0	41,0	10,8	16,5	8,8	13,5	22,0	36,0	19,0	34,0	18,0	20,0
250,0	33,0	32,0	38,0	42,0	36,0	39,0	5,0	10,0	2,0	7,0	20,0	34,0	17,0	32,0	17,3	19,0
300,0		36,1		41,0		38,0		4,8		1,8		32,0		30,0		19,0
400,0		41,7		39,0		36,0		-2,7		-5,7		30,0		28,0		18,0