

UC400 Cat.6 U/UTP HD

U/UTP Installation cable



Application

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)
IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T;
IEEE 802.5 16 MB; ISDN; TPDDI; ATM
Power over Ethernet (PoE) / Type 1-4

Standards

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

Flame resistance

PVC: IEC 60332-1; Class Eca
LSHF(FRNC): IEC 60332-1; 60754-2; IEC 61034; Class Eca

Construction

Conductor	Bare copper wire: Nom. 0,54
Insulation	Polyethylene, Ø 0.95 mm nom
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core non-metallic cross separator (spline)
Sheath	PVC or LSHF (FRNC, LSOH), blue RAL 5012

Mechanical properties

Minimum bending radius	Installation	8 x D
	Installed	4 x D
Temperature range	during operation	-20°C up to + 60°C
	during installation	0°C up to + 50°C

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Electrical properties

at 20°C

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

Electrical data (nominal)

acc. to Cat.6 (at 20°C)

f (MHz)	Attenuation		NEXT		PS-NEXT		ACR		PS-ACR		ELFEXT		PS-ELFEXT		Return loss	
	(dB/100m)	(dB)	(dB)	(dB)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB/100m)	(dB)	(dB)	(dB)	(dB)
	max.	Nom.	min.	nom.	min.	Nom.	Min.	Nom.	Min.	Nom.	min.	Nom.	min.	Nom.	min.	Nom.
1	2.1	1.9	74	78	72	75	72.0	76.1	70.0	73.1	68	82	65	80	20	22
4	3.8	3.8	65	69	63	66	61.2	65.2	59.2	62.2	56	70	53	68	23	25
10	6.0	6.0	59	63	57	60	53.0	57.0	51.0	54.0	48	62	45	60	25	27
16	7.6	7.6	56	60	54	57	48.4	52.3	46.4	49.3	44	58	41	56	25	27
20	8.5	8.5	55	59	53	56	46.5	50.0	44.5	47.0	42	56	39	54	25	27
31.2	10.7	10.7	52	56	50	53	41.3	45.0	39.3	42.0	38	52	35	50	23.6	26
62.5	15.5	15.1	47	51	45	48	31.5	36.0	29.5	33.0	32	46	29	44	21.5	24
100	19.9	19.1	44	48	42	45	24.1	28.9	22.1	25.9	28	42	25	40	20.1	23
125	22.5	21.3	43	47	41	44	20.5	25.2	18.5	22.2	26	40	23	38	19.5	22
155.5	25.4	23.8	42	45	40	42	16.6	21.3	14.6	18.3	24	38	21	36	18.8	21
175	27.1	25.3	41	44	39	41	13.9	19.1	11.9	16.1	23	37	20	35	18.4	21
200	29.2	27.0	40	44	38	41	10.8	16.5	8.8	13.5	22	36	19	34	18.0	20
250	33.0	32.0	38	42	36	39	5.0	10.0	2.0	7.0	20	34	17	32	17.3	19
300		36.1		41		38		4.8		1.8		32		30		19
400		41.7		39		36		-2.7		-5.7		30		28		18

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Technical data

Product Reference Code	Produktname	Outer diameter mm	Euro Class	Fire load		Weight kg/km	Copper index	Tensile force N
				MJ/km	kWh/m			
60010360	UC400 Cat.6 U/UTP HD 4P LSHF (Bu) 305BR	5.3	Eca	316	0.087	36	18,1	100
60011705	UC400 Cat.6 U/UTP HD 4P PVC (Gy) 305BR	5.3	Eca	316	0.087	36	18,1	100
60025990	UC400 Cat.6 U/UTP HD 4P LSHF (Bu) 500m	5.3	Eca	316	0.087	36	18,1	100
60026614	UC400 Cat.6 U/UTP HD 4P PVC (Bu) 500m	5.3	Eca	316	0.087	36	18,1	100