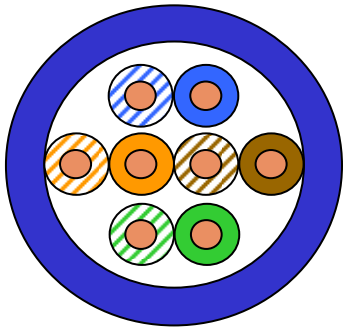
UC300 24 Cat.5e

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

Standards

EIA/TIA 568A;
ISO/IEC 11801 2nd ed.; IEC 61156-5
EN 50173; EN 50288-3-1

Flame resistance

LSHF IEC 60332-1; IEC 60754-2; IEC 61034

Construction

Conductor	bare copper wire Ø 0.5 mm (AWG24)
Insulation	Polyethylene, Ø 0.9 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Sheath	LSHF (LSOH), Violet RAL 4005

Mechanical properties

Minimum bending radius	Installation	8 x D
	Installed	4 x D
Temperature range	during operation	-20℃ upto + 60℃
	during installation	0℃ upto + 50℃

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UC300 24 Cat.5e

Electrical properties

at 20℃

DC loop resistance	≤ 190 Ω /km
Resistance unbalance	≤ 2%
Insulation resistance (500 V)	≥ 2000 MΩ *km
Capacitance at 800 Hz	nom. 48 nF/km
Capacitance unbalance (pair to ground)	≤ 1500 pF/km
Characteristic impedance (1-100 MHz)	(100 ± 15) 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

Nominal transmission characteristics

at 20℃

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)
1	1,9	71	68	69,1	66,1	68	65	20
4	3,7	62	59	58,3	55,3	56	53	23
10	6	56	53	50	47,0	48	45	25
16	7,6	53	50	45,4	42,4	44	41	25
20	8,5	51	48	42,5	39,5	42	39	25
31,2	10,7	49	46	38,3	35,3	38	35	24
62,5	15,7	44	41	28,3	25,3	32	29	22
100	19,8	41	38	21,2	18,2	28	25	20
125	22,3	40	37	17,7	14,7	26	23	19
155,5	24,2	38	35	13,8	10,8	24	21	
175	25,7	37	34	11,3	8,3	23	20	
200	27,5	36	33	8,5	5,5	22	19	
250	29,2	35	32	5,8	2,8	20	17	
300	32,0	34	31	2,0	-1,0	16	13	

Technical data

Product code	Designation	Product name	Outer diameter	Fire load		Weight	Copper content	Max tensile force during installation
			mm	MJ/km	kWh/m	kg/km	kg/km	N
1010655-00305BR	J-2YH 4x2x0.5	UC300 24 Cat.5e U/UTP 4P LSHF	5.0	336	0.093	36	17.5	100N

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