

UC300 24 Cat.5e

U/UTP Installation Cable



1.1. Cable

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	PVC alt. LSHF (FRNC, LSOH), grey RAL 7035 Duplex sheath: two cables parallel, separable

Mechanical properties

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

Electrical properties at 20°C

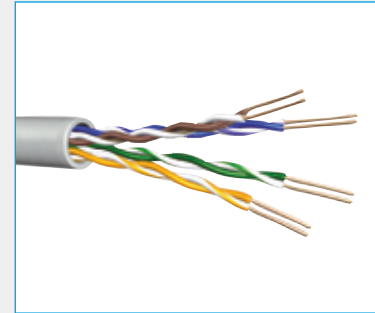
DC loop resistance	≤ 190 Ω /km
Resistance unbalance	≤ 2%
Insulation resistance (500 V)	≥ 2000 MΩ *km
Capacitance at 800 Hz	nom. 48 nF/km
Capacitance unbalance (pair to ground)	≤ 1500 pF/km
Characteristic impedance (1-100 MHz)	(100±15) Ω
Nominal velocity of propagation	approx. 67 %
Propagation delay	≤ 535 ns/100m
Delay skew	≤ 20 ns/100m
Test voltage (DC, 1 min) Core/Core	1000 V
Coupling attenuation	≥ 40 dB

Nominal transmission characteristics 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
1	1,9	71	68	69,1	66,1	68	65	20
10	6	56	53	50	47,0	48	45	25
100	19,8	41	38	21,2	18,2	28	25	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	Product name	Outer diameter	Fire load		Weight	Copper content	Max. tensile force during installation
			MJ/km	kWh/m			
		Mm			kg/km	kg/km	N
60011062	UC300 24 Cat.5e U/UTP 4P PVC	5.0	365	0.101	35	17.5	100
60011512	UC300 24 Cat.5e U/UTP 4P LSHF	5.0	336	0.093	36	17.5	100



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

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