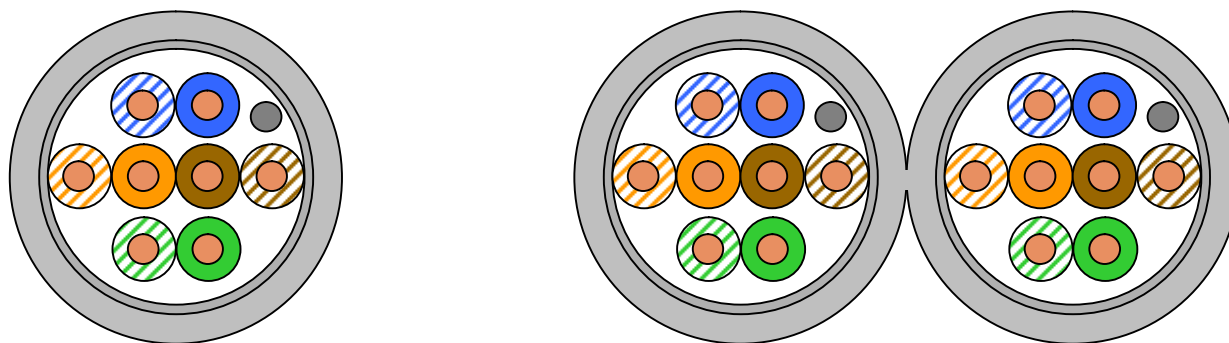


UC300 S24 Cat.5e

F/UTP AWG24/1 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) / PoE+

Standards

EN 50173-1; EN 50288-2-1
 ISO/IEC 11801; IEC 61156-5
 TIA/EIA-568-B.2
 IEEE 802.3at

Flame resistance

PVC: IEC 60332-1
 LSHF(LSOH): IEC 60332-1; IEC 60754-2; IEC 61034
 LSHF-FR(LSFROH): additionally IEC 60332-3-24

Construction

Conductor	bare copper wire, Ø 0.51 mm (AWG24/1)
Insulation	PE, Ø 1.1 mm
Twisting	2 cores to the pair
Cable lay up	4 pairs to the core
Screen	Al-laminated plastic foil, Drain wire AWG26 tinned
Sheath	PVC alt. LSHF(LSOH), grey RAL 7035 Duplex sheath: two cables parallel, separable

Mechanical properties

Bending radius	without load	≥ 25 mm
	with load	≥ 50 mm
Temperature range	during operation	-20°C to + 60°C
	during installation	0°C to + 50°C

UC300 S24 Cat.5e

Electrical properties

at 20°C ± 5°C

Loop resistance		≤ 190 Ω/km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 2000 MΩxkm
Mutual capacitance	at 800 Hz	Nom. 48 nF/km
Capacitance unbalance	(pair/ground)	≤ 1500 pF/km
Mean characteristic impedance	100 MHz	100 ± 5 Ω
Nominal velocity of propagation		ca. 67%
Propagation delay		≤ 535 ns/100 m
Delay skew		≤ 20 ns/100 m
Test voltage	(DC, 1 min) core/core and core/screen	1000 V
Transfer impedance	at 1 MHz	≤ 50 mΩ /m
	at 10 MHz	≤ 100 mΩ /m
	at 30 MHz	≤ 200 mΩ /m
Coupling attenuation		≥ 55 dB

Electrical data (nominal)

acc. to Cat.5e (at 20°C)

F (MHz)	Attenuation (dB/100m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100m)	PS-ACR (dB/100m)	ACRF (dB/100m)	PS-ACRF (dB/100m)	Return loss (dB)
1.0	1.9	71	68	69.1	66.1	68	65	20
4.0	3.7	62	59	58.3	55.3	56	53	23
10.0	6.0	56	53	50.0	47.0	48	45	25
16.0	7.6	53	50	45.4	42.4	44	41	25
20.0	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
100.0	19.8	41	38	21.2	18.2	28	25	20
125.0	22.3	40	37	17.7	14.7	26	23	19
155.5	24.2	38	35	13.8	10.8	24	21	
175.0	25.7	37	34	11.3	8.3	23	20	
200.0	27.5	36	33	8.5	5.5	22	19	
250.0	29.2	35	32	5.8	2.8	20	17	
300.0	32.0	34	31	2.0	-1.0	16	13	

UC300 S24 Cat.5e

Product order data

Product code	Cable type	Brand name	Outer diameter	Fire load		Weight	Copper content	Tensile force
				MJ/km	kWh/m			
1000057	J-2Y(St)Y 4x2x0.51	UC300 S24 Cat.5e F/UTP 4P	5.9	430	0.119	36	19.8	80
1000056	J-2Y(St)H 4x2x0.51	UC300 S24 Cat.5e F/UTP 4P LSHF		396	0.110	37		
1000491	J-2Y(St)H 4x2x0.51	UC300 S24 Cat.5e F/UTP 4P LSHF-FR						
1000251	J-2Y(St)Y 2x(4x2x0.51)	UC300 S24 Cat.5e F/UTP 2x4P	5.9/11.8	860	0.238	72	39.6	160
1000473	J-2Y(St)H 2x(4x2x0.51)	UC300 S24 Cat.5e F/UTP 2x4P LSHF		792	0.220	74		
1000477	J-2Y(St)H 2x(4x2x0.51)	UC300 S24 Cat.5e F/UTP 2x4P LSHF-FR						

Product Code Table

Product Description	Product Code	PG Reference Code	PG Part Number
UC300 S24 C5e F/UTP 4P PVC	1000057	60013161	60013161
UC300 S24 Cat.5e F/UTP 4P PVC	1000057-00100RW	60013161	60013162
UC300 S24 C5e F/UTP 4P PVC 305BR	1000057-00305BR	60013161	60011026
UC300 S24 C5e F/UTP 4P PVC 500DW	1000057-00500DW	60013161	60011258
UC300 S24 C5e F/UTP 4P PVC 500DP	1000057-00500DP	60013161	60017466
UC300 S24 C5e F/UTP 4P PVC 500DP	1000057-00500DP	60013161	60017466
UC300 S24 C5e F/UTP 4P PVC 1000DW	1000057-01000DW	60013161	60011257
UC300 S24 C5e F/UTP 4P LSHF	1000056	60011537	60011537
UC300 S24 C5e F/UTP 4P LSHF 100RW	1000056-00100RW	60011537	60013227
UC300 S24 C5e F/UTP 4P LSHF 305BR	1000056-00305BR	60011537	60011534
UC300 S24 Cat.5e F/UTP 4P LSHF 500DW	1000056-00500DW	60011537	60011536
UC300 S24 C5e F/UTP 4P LSHF 1000DW	1000056-01000DW	60011537	60011535
UC300 S24 C5e F/UTP 4P LSHF BU 305BR	1029768-00305BR	60011704	60011704
UC300 S24 C5e F/UTP 4P LSHF BU 1000DW	1029768-01000DW	60011704	60011709
UC300 S24 C5e F/UTP 2x4P PVC	1000251	60017483	60017483
UC300 S24 C5e F/UTP 2x4P PVC 500DP	1000251-00500DP	60017483	60017484
UC300 S24 C5e F/UTP 2x4P PVC 500DW	1000251-00500DW	60017483	60017485
UC300 S24 C5e F/UTP 2x4P PVC 1000DP	1000251-01000DP	60017483	60017486
UC300 S24 C5e F/U 2X4P LSHF	1000473	60016039	60016039
UC300 S24 C5e F/U 2X4P LSHF 100DW	1000473-00100DW	60016039	60016042
UC300 S24 C5e F/UTP 2x4P LSHF 500DW	1000473-00500DW	60016039	60017488
UC300 S24 C5e F/UTP 2x4P LSHF 1000DP	1000473-01000DP	60016039	60017489

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