

UC300 S24 Cat.5e F/UTP 4P PE

Data horizontal cable Cat.5e F/UTP



GENERAL INFO

Primary (Campus), Secondary (Riser), Tertiary (Horizontal) IEEE 802.3: 10Base-T, 100Base-T, 1000Base-T; IEEE 802.5 ISDN, TPDDI, ATM, CATV, IP Cameras, Broadband Video, SOHO-Cabling; Power over Ethernet (PoE) / Type 1-4

CABLE FEATURES

Draka installation cable for outdoor use UC300 S24 Cat.5e F/UTP 4P PE

- Copper data cable of Cat.5e for structured cabling with a bandwidth of 300 MHz.
- The cable is single-shielded with a high-quality foil shield.
- The 4-pair simplex installation cable with 8 copper wires AWG24 is suitable for connecting sockets, patch fields and modules, also with IDC technology, for laying in buildings, in fire protection ducts or flush-mounted and outdoors for direct burial
- the product exceeds the requirements of EN50173-1; EN50288-2-1, ISO/IEC11801; IEC61156-5 and IEEE802.3af/at/bt.
- The jacket is made of halogen-free polyethylene.
- the product fulfills segregation class C according to EN50174 with a coupling attenuation of 55 dB.
- The cable is future-proof for all class C and D applications and suitable for operating PoE and PoE+ over a channel length of up to 100m. It is suitable for the following applications: Telephony, Ethernet, Fast Ethernet and Gigabit Ethernet, 10BaseT, 100BaseT, 100BaseT, 10Base-T or up to 1,000 Mbit/s.

Latest version of this data sheet is available for download: <u>ProductFamily238836</u>

CERTIFICATIONS AND DESIGN STANDARDS



IEC 61156-5 EN 50288-2-1 Generic telecom cabling for customer premises Datacom cables Data communications cable shielded up to 100MHz

APPLICATION PROPERTIES

Operation temperature (min) [°C] Installation temperature (min) [°C] Bending radius (rule) -20 (max) [°C] 60 0 (max) [°C] 50

Installation: 8 x outer diameter; Installed: 4 x outer diameter



CABLE CONSTRUCTION

Conductor category	Class 1 = solid
Conductor material	Copper
Conductor surface	Bare
AWG size	24
Core insulation material	Polyethylene (PE)
Nominal diameter over insulation [mm]	1.1
Screen over stranding element	None
Number of stranding elements	4
Identification of stranding elements	Core colors: blue/white; orange/white; green/white; brown/white
Screen material	Aluminium
Screen over stranding	Foil
Material outer sheath	Polyethylene (PE)
Cable shape	Round
Nominal outer diameter [mm]	7.8

ELECTRICAL PROPERTIES

Test voltage [kV]	1
Category	5E
NVP value [%]	67
Propagation delay (max) [ns/100m]	535
Delay skew (max) [ns/100m]	20
Characteristic impedance [Ohm]	100
Nominal mutual capacitance [pF/m]	48
Loop resistance [Ohm]	190
Coupling attenuation [dB]	55
Insulation resistance [MΩ·km]	5,000
Transfer impedance at 10 MHz [mOhm/m]	100
Segregation classification (acc. EN 50174-2)	С



PRODUCT ORDER DATA

Product name	Nominal outer diameter [mm]	Max. tensile strength during installation [kN]	rensile crength during tallation		Packaging type	Standard packaging quantity	Gross weight	
UC300 S24 Cat.5e F/UTP 4P PE	7.8	0.1	19.8	60016745	Drum	1	52.3	
UC300 S24 Cat.5e F/UTP 4P PE	7.8	0.1	19.8	60016746	Drum	500	29.9	
UC300 S24 Cat.5e F/UTP 4P PE	7.8	0.1	19.8	60016747	Drum	1,000	56.4	

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CAT 5E TRANSMISSION CHARACTERISTICS (AT 20°C)

Frequency (MHz)	Attenuation (dB/100 m)	NEXT (dB)	PS-NEXT (dB)	ACR (dB/100 m)	PS-ACR (dB/100 m)	ACRF (dB/100m)	PS-ACRF (dB)	Return Loss (dB)
1	1.9	71	68	69	66	64	61	-
4	3.7	62	59	58	55	52	49	20
10	5.8	56	53	50	47	44	41	20
16	7.4	53	50	46	43	40	37	25
20	8.3	52	49	44	41	38	35	25
31.2	10.5	49	46	38	35	34	31	24
62.5	15	44	41	29	26	28	25	22
100	19.2	41	38	22	19	24	21	20
125	21.7	40	37	18	15	22	19	19
155	24.3	38	35	14	11	20	17	
175	26	38	35	12	9	19	16	
200	27.9	37	34	9	6	18	15	
250	31.5	35	32	4	1	16	13	
300	34.9	34	31	-1	-4	14	11	