

TrueNet®

U/FTP 450MHz/AWG23 Category 6 horizontal cable



The ADC KRONE U/FTP 450/23 cable is designed for applications running up to 450 MHz which provides considerable headroom for Category 6 installations.

With low-skew performance at high data transmission rates the cable is suitable for real-time applications such as VoIP and video conferencing. Which is an increasing requirement for Gigabit-Ethernet, running on 4 pairs.

The cable is light weight whilst offering a shielded solution. Each pair is individually shielded which provides good protection from sources of interference. The cable satisfies Class B interference radiation standards (EN 55022), as well as immunity (EN 55024), ensuring CE-compliant networks.

TECHNICAL DATA

Features:

- Specified up to 450 MHz
- Each pair is wrapped in metal foil (PiMF)
- Low skew between the pairs
- Halogen free (LSZH)

Benefits:

- Suitable for real-time applications such as VoIP
- PiMF cable is free from interference from adjacent cables and external sources of interference
- Covered by the TrueNet® system warranty*



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Ordering Information

Description	Catalogue Number
Cat 6 U/FTP 4pr LSZH grey cable reel 1000m	7053 3 271-55

Electrical Characteristics (at 20°C)

Max. resistance difference	2%
Insulation resistance	>5000 MΩ x km
Impedance Zo at 0.064 MHz	125 Ω +/- 20%
Impedance Zo at 1 - 100 MHz	100 Ω +/- 15%
Impedance Zo at 101 - 250 MHz	100 Ω +/- 18%
Transfer impedance	<100 mΩ/m at 10 MHz
Longitudinal conversion loss dB/BZL = 1000m	>46 dB at 64 kHz
Longitudinal conversion loss dB/BZL = 100m	>40 dB at 1 MHz
Longitudinal conversion loss dB/BZL = 100m	>20 dB at 100 MHz
Propagation velocity at	>10 MHz (NVP x c) 0.79 x c
Propagation delay >10 MHz	4.2 ns/m
Delay skew	4 ns/100 m

Frequency in MHz	1	10	16	20	31.25	62.5	100	250	450
Attenuation in dB/ 100m per standard*	2.1	6.0	7.6	8.5	10.8	15.5	19.9	33.0	-
Typical data dB / 100m	1.9	5.5	7.1	7.8	9.9	14.0	17.7	28.1	38.6
Near-end crosstalk loss in dB per standard*	66.0	59.3	56.2	54.8	51.9	47.4	44.3	38.3	-
Typical data dB / 100m	100.0	100.0	100.0	100.0	100.0	95.0	93.0	88.0	83.0
PSNEXT in dB / 100m per standard*	64.0	57.3	54.2	52.8	49.9	45.4	42.3	36.3	-
Typical data dB / 100m	98.0	98.0	98.0	98.0	98.0	93.0	91.0	86.0	80.0
ELFEXT in dB / 100m per standard*	66.0	50.0	45.9	44.0	40.1	34.1	30.0	22.0	-
Typical data dB / 100m	93.0	93.0	93.0	93.0	90.0	84.0	81.0	67.0	51.0
PSELFEXT in dB / 100m per standard*	64.0	47.0	43.0	41.0	37.1	31.1	27.0	19.0	-
Typical data dB / 100m	91.0	91.0	91.0	91.0	86.0	82.0	79.0	66.0	50.0
ARC in dB	98.1	94.5	92.9	92.2	90.1	72.0	75.3	59.9	44.4

*Standard: Requirements on 100m installed Category 6 cable for Class E cabling links (corresponding to pr EN 50288-5-1)

Mechanical Characteristics

Conductor insulation	Halogen-free foam and skin material
Outer jacket	Halogen-free, flame retardant
Area/range of application	Dry and damp rooms
Temperature range (installation)	0 to +50°C
Operating temperature	-20 to +60°C
Min. bending radius for one-time bending	>40 mm
Min. bending radius during installation	>60 mm

Design Characteristics

Type designation	U/FTP AWG23 4PR LSZH
Category	6
Copper conductor	AWG23
Number of pairs	4
Fire rating (MJ/m)	0.57
Halogen free	Yes
Fire retardant according to	IEC 60332-1, Category C
Non-corrosive according to	IEC 60754-2 (FRNC)
Low smoke according to	IEC 61034
Tensile strength for installation [N]	105
Outside-diameter: [mm]	7.4 mm
Weight: [kg/km]	58

* Terms & conditions apply

TECHNICAL DATA



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