

Product: 1303EPU

CATSNAKE Category 6A Cable, 4 Pair, S/FTP, PVC PUR upjacketed

Product Description

CATSNAKE Category 6A Cable, 4 Pair, S/FTP, PVC PUR upjacketed

Technical Specifications

Product Overview

Suitable Applications:	Field deployable CAT6a patch horizontal and building backbone cable; AVB, Dante, CobraNEt, eSnake, Ethersound, Digital audio over Ethernet; Support current and future Category 6A and 6 applications, such as: 10GBase - T(10 Gigabit Ethernet), 1000 Base - T (Gigabit Ethernet), 100 Base - T, 10 Base - T, FDDI, ATM; Compatible connectors Belden R301601 000S1 (T568A) and R301602 000S1 (T568B)

Construction Details

Conductor

Element	Size	Stranding	Material	No. of Pairs
Individual Shielded Pair	24 AWG	7x32	BC - Bare Copper	4

Insulation

Element	Material	Nom. Insulation Diameter	Color Code
Individual Shielded Pair	PE - Polyethylene (Foam)	1.4 mm (0.055 in)	White & Blue, White & Orange, White & Green, White & Brown

Cable Core

Description
4 shielded pairs twisted together

Inner Shield

Element	Shield Type	Material	Coverage
Individual Shielded Pair	Tape	Bi-Laminate (Alum+Poly)	100%

Table Notes:	Aluminum facing outside

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Braid	Tinned Copper (TC)	80%	26 AWG (7x34) TC

Outer Jacket

Layer	Separator	Material	Nom. Diameter
1		PVC - Polyvinyl Chloride	7.2 mm (0.28 in)
2	non-Woven Tape	PUR - Polyurethane	8.7 mm (0.34 in)

Table Notes:	Matte Finish, Rugged Sheath
Overall Cable Diameter (Nominal):	8.7 mm (0.34 in)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
95 Ohm/km	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm

Delay

Max. Delay Skew	Nom. Velocity of Prop.
25 ns/100m	77%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. PSANEXT [dB]	Min. PSAACRF [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.5 dB/100m	75.3	72.3	72.8	69.8	68	65	20	67	67	40	35
4	4.6 dB/100m	66.3	63.3	61.7	58.7	56	53	23	67	66.2	34	23
10	7.1 dB/100m	60.3	57.3	53.2	50.2	48	45	25	67	58.2	30	15
16	9 dB/100m	57.2	54.2	48.3	45.3	43.9	40.9	25	67	54.1	28	10.9
31.2	12.6 dB/100m	52.9	49.9	50.4	47.3	38.1	35.1	23.6	67	48.3	25.1	5.1
62.5	18 dB/100m	48.4	45.4	30.4	27.4	32.1	9.1	21.5	65.6	42.3	22	
100	23 dB/100m	45.3	42.3	22.3	19.3	28	25	20.1	62.5	38.2	20	
125	25.8 dB/100m	43.8	40.8	18	15	26.1	23.1	19.4	61	36.3	19	
200	33.1 dB/100m	40.8	37.8	7.7	4.7	22	19	18	58	32.2	17	
250	37.3 dB/100m	39.3	36.3	2	-1	20	17	17.3	56.5	30.2	16	
300	41.1 dB/100m	38.1	35.1	-3	-6	18.5	15.5	17.3	55.3	28.7		
500	54.3 dB/100m	34.8	31.8	-19.5	-22.5	14	11	17.3	52	24.2		

Table Notes:	Reference standard: IEC 61156-6

Transfer Impedance

Frequency	Max. Transfer Impedance
1 Mhz	Max. 50 mOhm/m
10 Mhz	Max. 100 mOhm/m
30 Mhz	Max. 200 mOhm/m
100 Mhz	Max. 1000 mOhm/m

Transfer Impedance Class:	Grade 2
Screening Class:	Type Ib
Table Notes:	Coupling Attenuation

Voltage

Voltage Rating
72 V DC

Mechanical Characteristics

Temperature

Operating	Installation	Storage
-30°C to +60°C	-20°C To +50°C	-30°C to +60°C

Trailing/Flexing Properties

Motion	Number of Cycles	Radius	Speed	Acceleration	Traverse Length
Trailing/Bending	2,000,000	80 mm	5 m/s	5 m/s²	5 m

Table Notes:	Drag chain test

Bend Radius

Stationary Min.	Installation Min.
35 mm (1.4 in)	70 mm

Max. Pull Tension:	75 N (17 lbf)
Bulk Cable Weight:	83 kg/km

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor
Flammability / Reaction to Fire:	IEC 60332-1-2
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Data Category:	Category 6A
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1
CENELEC Compliance:	EN 50173-1, Segregation class according EN50174-2 = c

European Directive Compliance:	EU CE Mark
UK Regulation Compliance:	UKCA Mark

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system.

History

Update and Revision:	Revision Number: 0.652 Revision Date: 03-12-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN
1303EPU.00305	Black	Reel	305 m	8719605001009
1303EPU 010500	Black	Reel	500 ft	612825381808
1303EPU.00500	Black	Reel	500 m	8719605001016
1303EPU 0101000	Black	Reel	1,000 ft	612825381785
1303EPU 0101640	Black	Reel	1,640 ft	612825381792

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.