



Product: [2425D](#)

DataTwist 2400 Category 6+ Cable, 4 Pair, U/UTP, LSZH Indoor CPR Eca IEC60332-3-25

Product Description

Category 6 Enhanced Premise Horizontal Cable (350MHz), 4-Pair, 24 AWG Solid Bare Copper Conductors, U/UTP, Polyethylene Insulation, LSZH Jacket IEC60332-3-25

Technical Specifications

Product Overview

Suitable Applications:	Horizontal and building backbone cable; Support current and future Category 6 and 5e applications, such as: 1000Base - T (Gigabit Ethernet), 100 Base - T, 10 Base - T, FDDI, ATM
------------------------	---

Construction Details

Conductor

Element	Size	Stranding	Material	No. of Pairs	No. of Elements
Individual Pair	24 AWG	Solid	BC - Bare Copper	4	8

Insulation

Element	Material	Nom. Insulation Diameter	Color Code
Individual Pair	PE - Polyethylene	1 mm (0.039 in)	White/Blue & Blue, White/Orange & Orange, White/Green & Green, White/Brown & Brown

Cable Core

Description
4 pairs twisted together

Outer Jacket

Material	Nom. Diameter	Ripcord
LSZH - Low Smoke Zero Halogen (Flame Retardant)	6.6 mm (0.26 in)	Yes

Overall Cable Diameter (Nominal):	6.6 mm (0.26 in)
-----------------------------------	------------------

Electrical Characteristics

Electricals

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

Delay

Max. Delay Skew	Nom. Velocity of Prop.
35 ns/100m	70%

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. TCL [dB]	Min. ELTCTL [dB]
1	2 dB/100m	75.3	73.3	73.3	71.3	70.8	67.8	20	40	35
4	3.7 dB/100m	66.3	64.3	62.6	60.6	58.8	55.8	23	40	23
10	5.8 dB/100m	61.8	59.8	56	54	50.8	47.8	25	40	15
16	7.4 dB/100m	58.6	56.6	51.2	49.2	46.7	43.7	25	38	10.9
20	8.3 dB/100m	57.1	55.1	48.8	46.8	44.8	41.8	25	37	9

31.2	10.4 dB/100m	54	52	43.6	41.6	40.9	37.9	23.6	35.1	5.1
62.5	15 dB/100m	49.1	47.1	34.1	32.1	34.9	31.9	21.5	32.6	
100	19.3 dB/100m	45.8	43.8	26.5	24.5	30.8	27.8	20.8	30	
200	28.3 dB/100m	40.9	38.9	12.6	10.6	22.8	21.8	19.5	27	
250	32.1 dB/100m	39.3	37.3	7.2	5.2	22.8	19.8	18	26.0	
300	35.6 dB/100m	38.1	36.1	2.5	0.5	21.3	18.3	17.5	25.2	
350	38.8 dB/100m	37.1	35.1			19.9	16.9	17.0	24.6	

Table Notes:	Limits below 4 MHz are for information only. Reference standard: IEC 61156-5
--------------	--

Voltage

Voltage Rating
72 V DC

Mechanical Characteristics

Temperature

Operating	Installation
-20°C to +75°C	0°C To +50°C

Bend Radius

Stationary Min.	Installation Min.
26 mm (1.0 in)	52 mm

Max. Pull Tension:	110 N (25 lbf)
Bulk Cable Weight:	52 kg/km

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Eca
Flammability / Reaction to Fire:	IEC 60332-1-2, IEC 60332-2-25
CPR Compliance:	CPR Euroclass: Eca
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61034-2 - Smoke Density Min Transmittance = 60%
CENELEC Compliance:	EN 50173-1, Segregation class according EN50174-2 = a
European Halogen Free Standards:	IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3
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: 0.317 Revision Date: 07-31-2024
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
2425D.06305	Blue	Reel	305 m	8719605005328
2425D.K6305	Blue	Reel	305 m	8719605147837
2425D.06500	Blue	Reel	500 m	8719605005335
2425D.K6500	Blue	Reel	500 m	8719605147844
2425D.061000	Blue	Reel	1,000 m	8719605005311
2425D.08305	Gray	Reel	305 m	8719605141354
2425D.08500	Gray	Reel	500 m	8719605005366
2425D.K8500	Gray	Reel	500 m	8719605147851
2425D.07305	Purple	Reel	305 m	8719605005359
2425D.071000	Purple	Reel	1,000 m	8719605005342

© 2024 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.