



Product: 2424 ☑

Category 6+ Enhanced Cable, 4 Pair, U/UTP, LSZH

Product Description

Category 6+ Enhanced Premise Horizontal Cable (350MHz), 4 Pair, 23 AWG Solid Bare Copper Conductors, U/UTP, Haloarrest® LSZH Jacket

Technical Specifications

Product Overview

Suitable Applications: Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE

Construction Details

Conductor

Size	Stranding	Material	Number of Pairs
23	Solid	BC - Bare Copper	4

Insulation

Material	Color Code
PO - Polyolefin	White/Blue Stripe & Blue, White/Orange Stripe & Orange, White/Green Stripe & Green, White/Brown Stripe & Brown

Outer Jacket

Separator	Material	Material Trade Name	Nom. Diameter	Ripcord
Dielectric Tape (Patented)	LSZH - Low Smoke Zero Halogen (Flame Retardant)	Haloarrest®	0.221 in (5.61 mm)	Yes
Overall Cable Diameter (Nominal):	0.221 in (5.61 mm)			

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
78 Ohm/km	160 pF/100m

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	537.6 ns/100m	35 ns/100m	70%

High Frequency

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]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
2.0 dB/100m	79.3	77.3	77.3	75.3	70.8	67.8	20.0	100 ± 15	102 ± 15
3.7 dB/100m	70.3	68.3	66.5	64.5	58.8	55.8	23.6	100 ± 15	100 ± 15
5.3 dB/100m	65.8	63.8	60.5	58.5	52.7	49.7	25.3	100 ± 15	100 ± 15
5.9 dB/100m	64.3	62.3	58.4	56.4	50.8	47.8	26.0	100 ± 15	100 ± 15
7.4 dB/100m	61.2	59.2	53.8	51.8	46.7	43.7	26.0	100 ± 15	100 ± 15
8.3 dB/100m	59.8	57.8	51.4	49.4	44.8	41.8	26.0	100 ± 15	100 ± 15
9.4 dB/100m	58.3	56.3	49.0	47.0	42.8	39.8	25.5	100 ± 15	100 ± 15
10.5 dB/100m	56.9	54.9	46.4	44.4	40.9	37.9	25.0	100 ± 15	100 ± 15
15.1 dB/100m	52.4	50.4	37.3	35.3	34.9	31.9	23.5	100 ± 15	100 ± 15
19.3 dB/100m	49.3	47.3	30.0	28.0	30.8	27.8	22.5	100 ± 15	100 ± 15
	(Attenuation) 2.0 dB/100m 3.7 dB/100m 5.3 dB/100m 5.9 dB/100m 7.4 dB/100m 8.3 dB/100m 9.4 dB/100m 10.5 dB/100m 15.1 dB/100m	(Attenuation) NEXT [dB] 2.0 dB/100m 79.3 3.7 dB/100m 70.3 5.3 dB/100m 65.8 5.9 dB/100m 64.3 7.4 dB/100m 61.2 8.3 dB/100m 59.8 9.4 dB/100m 58.3 10.5 dB/100m 56.9 15.1 dB/100m 52.4	(Attenuation) NEXT [dB] PSNEXT [dB] 2.0 dB/100m 79.3 77.3 3.7 dB/100m 70.3 68.3 5.3 dB/100m 65.8 63.8 5.9 dB/100m 64.3 62.3 7.4 dB/100m 61.2 59.2 8.3 dB/100m 59.8 57.8 9.4 dB/100m 58.3 56.3 10.5 dB/100m 56.9 54.9 15.1 dB/100m 52.4 50.4	(Attenuation) NEXT [dB] PSNEXT [dB] ACR [dB] 2.0 dB/100m 79.3 77.3 77.3 3.7 dB/100m 70.3 68.3 66.5 5.3 dB/100m 65.8 63.8 60.5 5.9 dB/100m 64.3 62.3 58.4 7.4 dB/100m 61.2 59.2 53.8 8.3 dB/100m 59.8 57.8 51.4 9.4 dB/100m 58.3 56.3 49.0 10.5 dB/100m 56.9 54.9 46.4 15.1 dB/100m 52.4 50.4 37.3	(Attenuation) NEXT [dB] PSNEXT [dB] ACR [dB] PSACR [dB] 2.0 dB/100m 79.3 77.3 77.3 75.3 3.7 dB/100m 70.3 68.3 66.5 64.5 5.3 dB/100m 65.8 63.8 60.5 58.5 5.9 dB/100m 64.3 62.3 58.4 56.4 7.4 dB/100m 61.2 59.2 53.8 51.8 8.3 dB/100m 59.8 57.8 51.4 49.4 9.4 dB/100m 58.3 56.3 49.0 47.0 10.5 dB/100m 56.9 54.9 46.4 44.4 15.1 dB/100m 52.4 50.4 37.3 35.3	(Attenuation) NEXT [dB] PSNEXT [dB] ACR [dB] PSACR [dB] (ELFEXT) [dB] 2.0 dB/100m 79.3 77.3 75.3 70.8 3.7 dB/100m 70.3 68.3 66.5 64.5 58.8 5.3 dB/100m 65.8 63.8 60.5 58.5 52.7 5.9 dB/100m 64.3 62.3 58.4 56.4 50.8 7.4 dB/100m 61.2 59.2 53.8 51.8 46.7 8.3 dB/100m 59.8 57.8 51.4 49.4 44.8 9.4 dB/100m 58.3 56.3 49.0 47.0 42.8 10.5 dB/100m 56.9 54.9 46.4 44.4 40.9 15.1 dB/100m 52.4 50.4 37.3 35.3 34.9	(Attenuation) NEXT [dB] PSNEXT [dB] ACR [dB] PSACR [dB] (ELFEXT) [dB] (PSELFEXT) [dB] 2.0 dB/100m 79.3 77.3 77.3 75.3 70.8 67.8 3.7 dB/100m 70.3 68.3 66.5 64.5 58.8 55.8 5.3 dB/100m 65.8 63.8 60.5 58.5 52.7 49.7 5.9 dB/100m 64.3 62.3 58.4 56.4 50.8 47.8 7.4 dB/100m 61.2 59.2 53.8 51.8 46.7 43.7 8.3 dB/100m 59.8 57.8 51.4 49.4 44.8 41.8 9.4 dB/100m 58.3 56.3 49.0 47.0 42.8 39.8 10.5 dB/100m 56.9 54.9 46.4 44.4 40.9 37.9 15.1 dB/100m 52.4 50.4 37.3 35.3 34.9 31.9	(Attenuation) NEXT [dB] PSNEXT [dB] ACR [dB] PSACR [dB] (ELFEXT) [dB] (PSELFEXT) [dB] Loss) [dB] 2.0 dB/100m 79.3 77.3 77.3 75.3 70.8 67.8 20.0 3.7 dB/100m 70.3 68.3 66.5 64.5 58.8 55.8 23.6 5.3 dB/100m 65.8 63.8 60.5 58.5 52.7 49.7 25.3 5.9 dB/100m 64.3 62.3 58.4 56.4 50.8 47.8 26.0 7.4 dB/100m 61.2 59.2 53.8 51.8 46.7 43.7 26.0 8.3 dB/100m 59.8 57.8 51.4 49.4 44.8 41.8 26.0 9.4 dB/100m 58.3 56.3 49.0 47.0 42.8 39.8 25.5 10.5 dB/100m 56.9 54.9 46.4 44.4 40.9 37.9 25.0 15.1 dB/100m 52.4 50.4 37.3 35.3 34.9 31.9	(Attenuation) NEXT [dB] PSNEXT [dB] ACR [dB] PSACR [dB] (ELFEXT) [dB] (PSELFEXT) [dB] Loss) [dB] Impedance (unFitted) 2.0 dB/100m 79.3 77.3 77.3 75.3 70.8 67.8 20.0 100 ± 15 3.7 dB/100m 70.3 68.3 66.5 64.5 58.8 55.8 23.6 100 ± 15 5.3 dB/100m 65.8 63.8 60.5 58.5 52.7 49.7 25.3 100 ± 15 5.9 dB/100m 64.3 62.3 58.4 56.4 50.8 47.8 26.0 100 ± 15 7.4 dB/100m 61.2 59.2 53.8 51.8 46.7 43.7 26.0 100 ± 15 8.3 dB/100m 59.8 57.8 51.4 49.4 44.8 41.8 26.0 100 ± 15 9.4 dB/100m 58.3 56.3 49.0 47.0 42.8 39.8 25.5 100 ± 15 10.5 dB/100m 56.9 54.9 46.4 44.4 40.9 <

155	24.5 dB/100m	46.4	44.4	21.9	19.9	27.0	24.0	21.6	100 ± 22	100 ± 15
200	28.2 dB/100m	44.8	42.8	16.6	14.6	24.8	21.8	21.0	100 ± 22	100 ± 15
250	31.8 dB/100m	43.3	41.3	11.5	9.5	22.8	19.8	20.5	100 ± 32	100 ± 15
300	35.2 dB/100m	42.1	40.1	6.9	4.9	21.3	18.3	20.1	100 ± 32	100 ± 15
350	38.4 dB/100m	41.1	39.1	2.7	0.7	19.9	16.9	19.8	100 ± 32	100 ± 15
400	41.5 dB/100m	40.3	38.3			18.8	15.8	19.5	100 ± 32	100 ± 15
450	44.3 dB/100m	39.5	37.5			17.7	14.7	19.2	100 ± 32	100 ± 15
500	47.1 dB/100m	38.8	36.8			16.8	13.8	19.0	100 ± 32	100 ± 15
550	49.7 dB/100m	38.2	36.2			16.0	13.0	18.8	100 ± 32	100 ± 15

Voltage

Voltage Rating 300 V

Mechanical Characteristics

Temperature

Operating	Installation	Storage
-20°C To +75°C	+5°C To +50°C	-20°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
1.0 in (25 mm)	2.25 in

Max. Pull Tension: 25 lbs (11 kg)
Bulk Cable Weight: 23 lbs/1000ft

Standards and Compliance

·	door - Euroclass Eca, Indoor, Non-Halogenated
Sustainability: Prod	
Guotamasinty.	oduct Lens™, Environmental Product Declaration (EPD) Available
Flammability / Reaction to Fire:	C 60332-1-2
CPR Compliance: CPR	PR Euroclass: Eca
IEEE Compliance: IEEE	EE 802.3bt Type 1, Type 2, Type 3, Type 4
Data Category: Cate	ategory 6
TIA/EIA Compliance: ANS	ISI/TIA-568.2-D Category 6
Third Party Performance Verification:	ategory 6
ISO/IEC Compliance: 1180	801 ed 2.2 (2011) Class E
CENELEC Compliance: Segi	gregation class according EN50174-2 = a
European Directive EU Compliance:	Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2017-07-10
UK Regulation Compliance: UKC	CCA Mark
APAC Compliance: Chin	nina RoHS II (GB/T 26572-2011)
Plenum Number: 2413	13

Product Notes

Notes: Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 MHz are for Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 MHz are for Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 MHz are for Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 MHz are for Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 350 MHz are for Electrical values are expected performance based on cable testing and representative performance within a typical Belden system.	ngineering
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History

Update and Revision: Revision Number: 0.513 Revision Date: 03-04-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN
2424.06305	Blue	Reel	305 m	8719605005038
2424 0061000	Blue	Reel	1,000 ft	612825061557
2424.08305	Gray	Reel	305 m	8719605005069
2424.07305	Purple	Reel	305 m	8719605005052
2424 0071000	Purple	Reel	1,000 ft	612825061540
2424.071000	Purple	Reel	1,000 m	8719605005045
2424.02500	Red	Reel	500 m	8719605005021

2424 0091000 V	Vhite	Reel	1,000 ft	612825061564
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