



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:	Suitable Applications: Premise Horizontal Cable, Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE+							
Construction Details								
Conductor								
	erial No. of Pairs e Copper 4							
Insulation								
Material	Color Code							
PO - Polyolefin White/Blue	e Stripe & Blue, White/Orange Stripe & Orange, White/	Green Stripe & Green, V	Vhite/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

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]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1	2.0 dB/100m	79.3	77.3	77.3	75.3	70.8	67.8	20.0	100 ± 15	102 ± 15
4	3.7 dB/100m	70.3	68.3	66.5	64.5	58.8	55.8	23.6	100 ± 15	100 ± 15
8	5.3 dB/100m	65.8	63.8	60.5	58.5	52.7	49.7	25.3	100 ± 15	100 ± 15
10	5.9 dB/100m	64.3	62.3	58.4	56.4	50.8	47.8	26.0	100 ± 15	100 ± 15
16	7.4 dB/100m	61.2	59.2	53.8	51.8	46.7	43.7	26.0	100 ± 15	100 ± 15
20	8.3 dB/100m	59.8	57.8	51.4	49.4	44.8	41.8	26.0	100 ± 15	100 ± 15
25	9.4 dB/100m	58.3	56.3	49.0	47.0	42.8	39.8	25.5	100 ± 15	100 ± 15
31.25	10.5 dB/100m	56.9	54.9	46.4	44.4	40.9	37.9	25.0	100 ± 15	100 ± 15
62.5	15.1 dB/100m	52.4	50.4	37.3	35.3	34.9	31.9	23.5	100 ± 15	100 ± 15
100	19.3 dB/100m	49.3	47.3	30.0	28.0	30.8	27.8	22.5	100 ± 15	100 ± 15

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 Mi	n.
1.0 in (25 mm)	2.25 in	
Max. Pull Tension	.: 25 I	bs (11 kg)
Bulk Cable Weigh	it: 23 I	bs/1000ft

Standards and Compliance

Statianability: Product Lens™, Environmental Product Declaration (EPD) Available Flammability / Reaction CR 60332-1-2 CPR Compliance: CPR Euroclass: Eca EEE Compliance: EEE 802.3bt Type 1, Type 2, Type 3, Type 4 Data Category: Category 6 TAVEIA Compliance: NSI/TIA-568.2-D Category 6 TAVEIA Compliance: NSI/TIA-568.2-D Category 6 Tavier Sardy: Category 6 Stole Compliance: Stole 0.2 (2011) Class E Stole Compliance: Stole 0.2 (2011) Class E CENELEC Compliance: Stole 0.2 (2011) Class E Category Compliance: Stole 0.2 (2011) Class E Category Compliance: Stole 0.2 (2011) Class E Category Compliance: Stole 0.2 (2015)/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2017-07-10 Category Compliance: UKA Mark APAC Compliance: Cina RoHS II (GB/T 26572-2011)		
Fammability / Reaction onEc 60332-1-2CPR Compliance:CPR Euroclass: EcaEEE 602.3bt Type 1, Type 2, Type 3, Type 4Data Category:Category 6Category 6Category 6TIA/EIA Compliance:ANSI/TIA-568.2-D Category 6TiA/EIA Compliance:Category 6Stolf Compliance:1801 ed 2.2 (2011) Class ECENELEC Compliance:Segregation class according EN50174-2 = aEuropean Directive onUD irective 2015/663/EU (RoHS 2 amendment), EU Directive 2011/05/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2017-07-10UK Regulation Compliance:VKCA MarkAPAC Compliance:China RoHS II (GB/T 26572-2011)	Environmental Suitability:	Indoor - Euroclass Eca, Indoor, Non-Halogenated
Fire: Inclusion CPR compliance: CPR Euroclass: Eca IEEE Compliance: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4 Data Category: Category 6 TIA/EIA Compliance: ANSI/TIA-568.2-D Category 6 Store of the	Sustainability:	Product Lens™, Environmental Product Declaration (EPD) Available
IEEE Compliance:IEEE 802.3kt Type 1, Type 2, Type 3, Type 4Data Category:Category 6TALEIA Compliance:ANSI/TIA-568.2-D Category 6Tird Party Performance Verification:Category 6ISO/IEC Compliance:1801 ed 2.2 (2011) Class ECINELEC Compliance:Segregation class according EN50174-2 = aEuropean Directive Compliance:Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/9/EU (WEEE), REACH: 2017-07-10UK Regulation Compliance:KCA MarkAPA Compliance:IMC Amark	Flammability / Reaction to Fire:	IEC 60332-1-2
Data Category:Category 6TIAEIA Compliance:ANSI/TIA-568.2-D Category 6Tind Party Performance Verification:Category 6ISO/IEC Compliance:1801 ed 2.2 (2011) Class ECENELEC Compliance:Segregation class according EN50174-2 = aEuropean Directive Compliance:Urirective 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2017-07-10UK Regulation Compliance:UKCA MarkAPAC Compliance:Compliance:Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/85/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2017-07-10	CPR Compliance:	CPR Euroclass: Eca
TIA/EIA Compliance: ANSI/TIA-568.2-D Category 6 Third Party Performance: Category 6 ISO/IEC Compliance: 1801 ed 2.2 (2011) Class E ECENELEC Compliance: Segregation class according EN50174-2 = a European Directive compliance: U 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: UKCA Mark APAC Compliance: China RoHS II (GB/T 26572-2011)	IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Third Party Performance Verification: Category 6 ISO/IEC Compliance: 11801 ed 2.2 (2011) Class E CENELEC Compliance: Segregation class according EN50174-2 = a European Directive Compliance: EU 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: UKCA Mark APAC Compliance: China RoHS II (GB/T 26572-2011)	Data Category:	Category 6
Verification: Category 6 ISO/IEC Compliance: 11801 ed 2.2 (2011) Class E CENELEC Compliance: Segregation class according EN50174-2 = a European Directive Compliance: EU 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: UKCA Mark APAC Compliance: China RoHS II (GB/T 26572-2011)	TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 6
CENELEC Compliance: Segregation class according EN50174-2 = a European Directive Compliance: EU 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: UKCA Mark APAC Compliance: China RoHS II (GB/T 26572-2011)	Third Party Performance Verification:	Category 6
European Directive Compliance: EU 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: UKCA Mark APAC Compliance: China RoHS II (GB/T 26572-2011)	ISO/IEC Compliance:	11801 ed 2.2 (2011) Class E
Compliance: Directive 2013/003/E0 (K0H3 2 amenument), E0 Directive 2017/03/E0 (K0H3 2), E0 Directive 2012/19/E0 (WEEE), KEACH. 2017-07-10 UK Regulation Compliance: UKCA Mark APAC Compliance: China RoHS II (GB/T 26572-2011)	CENELEC Compliance:	Segregation class according EN50174-2 = a
APAC Compliance: China RoHS II (GB/T 26572-2011)	European Directive Compliance:	EU 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:	UKCA Mark
Plenum Number: 2413	APAC Compliance:	China RoHS II (GB/T 26572-2011)
	Plenum Number:	2413

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 Engineering Information Only. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0.
History	

Update and Revision:	Revision Number: 0.516 Revision Date: 04-29-2024

Part Numbers

Variants	
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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

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