

Product: 7924A

DataTuff® Cat 5e, 4 Bonded-Pr #24 Str TC, PO Ins, PVC Jkt, CMX-Outdoor CMR

Request Sample

Product Description

Industrial Ethernet Cat 5e, 4 Bonded-Pair 24AWG (7x32) Tinned Copper, PO Insulation, PVC Outer Jacket, CMX-Outdoor CMR

Technical Specifications

Product Overview

Suitable Applications:	outdoor, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc.
Patent:	This product has one or more applicable patents. More information on patents can be found at https://www.belden.com/patents.

Construction Details

Conductor

Element	Size	Stranding	Material	No. of Pairs	No. of Elements
Pair(s)	24 AWG	7x32	TC - Tinned Copper	4	4

Insulation

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

Bonded-Pair:	Yes

Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.242 in (6.15 mm)	No

Overall Cable Diameter (Nominal):	0.242 in (6.15 mm)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
93.8 Ohm/km (28.6 Ohm/1000ft)	66 pF/100m

Delay

Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
510 ns/100m	25 ns/100m	70%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted) [Ohm]	Max./Min. Fitted Impedance [Ohm]
1	2.4 dB/100m	65.3	65.3	62.9	63.8	60.8	20	100 ± 12	105 ± 10
4	4.8 dB/100m	56.3	56.3	51.5	51.7	48.7	23	100 ± 12	100 ± 10
8	6.8 dB/100m	51.8	51.8	45	45.7	42.7	24.5	100 ± 12	100 ± 10
10	7.7 dB/100m	50.3	50.3	42.6	43.8	40.8	25	100 ± 12	100 ± 10
16	9.7 dB/100m	47.3	47.3	37.5	39.7	36.7	25	100 ± 12	100 ± 10
20	11.0 dB/100m	45.8	45.8	34.8	37.7	34.7	25	100 ± 12	100 ± 10
25	12.4 dB/100m	44.3	44.3	31.9	35.8	32.8	24.3	100 ± 15	100 ± 10
31.25	13.9 dB/100m	42.9	42.9	29	33.9	30.9	23.6	100 ± 15	100 ± 10

62.5	20.2 dB/100m	38.4	38.4	18.3	27.8	24.8	21.5	100 ± 15	100 ± 10
100	26.0 dB/100m	35.3	35.3	9.2	23.8	20.8	20.1	100 ± 18	
155	33.2 dB/100m	32.5	32.5	0	19.9	16.9	19	100 ± 18	
200	38.4 dB/100m	30.8	30.8		17.7	14.7	19	100 ± 20	
250	43.7 dB/100m	29.3	29.3		15.8	12.8	18	100 ± 20	
300	48.6 dB/100m	28.2	28.2		14.2	11.2	18	100 ± 20	
310	49.5 dB/100m	27.9	27.9		13.9	10.9	18	100 ± 20	
350	53.2 dB/100m	27.2	27.2		12.9	9.9	17	100 ± 22	

Voltage

UL Voltage Rating
300 V (CMR), 300 V (CMX-Outdoor)

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
60°C	-40°C To +75°C	-25°C To +75°C	-25°C To +75°C

Bend Radius

Stationary Min.
0.25 in (6.4 mm)

Max. Pull Tension:	40 lbs (18 kg)
Bulk Cable Weight:	26 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1666 Riser, FT4, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CMR, CMX-Outdoor
CEC / C(UL) Compliance:	CMX-Outdoor
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
Third Party Performance Verification:	Category 5e Patch
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-6
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	EtherNet/IP is a trademark of ControlNet Internation, Ltd. under license by Open DeviceNet Vendor Association, Inc. Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.

History

Update and Revision:	Revision Number: 0.569 Revision Date: 04-29-2024

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7924A 0105000	Black				C
7924A 0101000	Black	Reel	1,000 ft	612825191414	C
7924A 0102000	Black	Reel	2,000 ft	612825191421	C
7924A 0061000	Blue	Reel	1,000 ft	612825191391	C
7924A 0081000	Gray	Reel	1,000 ft	612825191407	C
7924A 0021000	Red	Reel	1,000 ft	612825191384	C
7924A 1NH1000	Teal	Reel	1,000 ft	612825191438	C

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