



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/resources/patents .

Construction Details

Conductor

Size	Stranding	Material	Number of Pairs
24 AWG	7x32	TC - Tinned Copper	4

Insulation

Material	Nom. Insulation Diameter	Color Code
PO - Polyolefin	0.040 in (1.0 mm)	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	66 pF/ft

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)	Max./Min. Fitted Impedance
1	2.4 dB/100m	65.3	65.3	62.9	63.8	60.8	20	100 ± 12 Ohm	105 ± 10 Ohm
4	4.8 dB/100m	56.3	56.3	51.5	51.7	48.7	23	100 ± 12 Ohm	100 ± 10 Ohm
8	6.8 dB/100m	51.8	51.8	45	45.7	42.7	24.5	100 ± 12 Ohm	100 ± 10 Ohm
10	7.7 dB/100m	50.3	50.3	42.6	43.8	40.8	25	100 ± 12 Ohm	100 ± 10 Ohm
16	9.7 dB/100m	47.3	47.3	37.5	39.7	36.7	25	100 ± 12 Ohm	100 ± 10 Ohm
20	11.0 dB/100m	45.8	45.8	34.8	37.7	34.7	25	100 ± 12 Ohm	100 ± 10 Ohm
25	12.4 dB/100m	44.3	44.3	31.9	35.8	32.8	24.3	100 ± 15 Ohm	100 ± 10 Ohm
31.25	13.9 dB/100m	42.9	42.9	29	33.9	30.9	23.6	100 ± 15 Ohm	100 ± 10 Ohm

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

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, 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
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.
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History

Update and Revision:	Revision Number: 0.397 Revision Date: 12-15-2021
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Variants

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

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.