

Product: 7961A

DataTuff® Cat 5e, 1 Quad (2 Pr) #22 Str TC, PO Ins, OS+TC Brd, PVC Jkt, CMG CMX-Outdoor

Request Sample

Product Description

Industrial Ethernet Cat 5e, 1 Quad (2 Pair) 22AWG (7x30) Tinned copper, PO Insulation , Overall Belfoil®+Tinned Copper Braid(85%) Shield, PVC Outer Jacket, CMG CMX-Outdoor

Technical Specifications

Product Overview

Suitable Applications:	PROFINET, outdoor, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc.

Construction Details

Conductor

Element	Size	Stranding	Material	No. of Elements
Quad(s)	22 AWG	7x30	TC - Tinned Copper	1

Insulation

Material	Color Code
PO - Polyolefin	White, Blue, Yellow, Orange

Inner Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	0.164 in (4.17 mm)

Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	100%
Braid	Tinned Copper (TC)	85%

Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.272 in (6.91 mm)	No

Overall Cable Diameter (Nominal):	0.272 in (6.91 mm)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Capacitance Unbalance
57 Ohm/km (17 Ohm/1000ft)	150 pF/ft

Delay

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

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [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	2.1 dB/100m	65.3	62.3	63.2	63.8	60.8	23	100 ± 20.2	105 ±10

4	4.0 dB/100m	56.3	53.3	56.3	51.7	48.7	23	100 ± 14.2	100 ±10
8	5.6 dB/100m	51.8	48.8	46.2	45.7	42.7	23	100 ± 11.3	100 ±10
10	6.3 dB/100m	50.3	47.3	43.9	43.8	40.8	25	100 ± 11.3	100 ±10
16	8.0 dB/100m	47.3	44.3	35.2	39.7	36.7	25	100 ± 11.3	100 ±10
20	9.0 dB/100m	45.8	42.8	36.5	37.7	34.7	25	100 ± 11.3	100 ±10
25	10.1 dB/100m	44.3	41.3	34.2	35.8	32.8	25.5	100 ± 11.3	100 ±10
31.25	11.4 dB/100m	42.9	39.9	31.3	33.9	30.9	23.6	100 ± 13.2	100 ±10
62.5	16.5 dB/100m	38.4	35.4	21.6	27.8	24.8	21.5	100 ± 16.9	100 ±10
100	21.3 dB/100m	35.3	32.3	17.1	23.8	20.8	20.1	100 ± 20.0	100 ±10

Voltage

UL Voltage Rating
300 V (CMG, CMX-Outdoor), 600 V (AWM 21047)

Mechanical Characteristics

Temperature

UL Temperature	Operating	Installation	Storage
60°C	-40°C To +80°C	-20°C To +60°C	-40°C To +80°C

Bend Radius

Stationary Min.
2.560 in (65.02 mm)

Max. Pull Tension:	55 lbs (25 kg)
Bulk Cable Weight:	43 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL 1685 (UL Loading), FT4, IEEE 1202 Vertical Tray Flame Test, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CMG, CMX-Outdoor, ITC, PLTC
AWM Compliance:	AWM 21047
CEC / C(UL) Compliance:	CMX-Outdoor;CMG
NEMA Compliance:	NEMA WC-63.1
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA-568.2-D Category 5e
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-6
European Directive Compliance:	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:	Operating Temperature subject to length de-rating. Cable passes -40C Cold Bend per UL 1581. Limits below 4 MHz are for information only.

History

Update and Revision:	Revision Number: 0.432 Revision Date: 04-29-2024

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN
7961A.00305	Green	Reel	305 m	8719605016799
7961A.00610	Green	Reel	610 m	8719605016805
7961A 1SW1000	Green, RAL 6018			612825367314
7961A 1SW2000	Green, RAL 6018			612825367321

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