



Product: <u>7962A</u> ☑

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

Request Sample

Product Description

Industrial Ethernet Cat 5e, Quad (2 Pair) 22AWG (19x34) Tinned Copper, PO Insulation, Overall Beldfoil®+Tinned Copper Braid(85%) Shield, TPE Outer Jacket, CM 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 | 19x34 | TC - Tinned Copper | 1 |

Insulation

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

Inner Jacket

| Material | Nom. Diameter |
|-------------------|--------------------|
| PE - Polyethylene | 0.169 in (4.29 mm) |

Outer Shield

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

Outer Jacket

| | Material | Nom. Diameter | Ripcord |
|-------|----------------------------|--------------------|---------|
| TPE - | - Thermoplastic Elastomer | 0.276 in (7.01 mm) | No |
| Overa | all Cable Diameter (Nomina | al): 0.276 in (7 | .01 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 | Max. Insertion Loss | Min. | Min. | Min. | Min. ACRF | Min. PSACRF | Min. RL (Return | Max./Min. Input Impedance | Max./Min. Fitted |
|-----------|---------------------|-----------|-------------|----------|---------------|-----------------|-----------------|---------------------------|------------------|
| [MHz] | (Attenuation) | NEXT [dB] | PSNEXT [dB] | ACR [dB] | (ELFEXT) [dB] | (PSELFEXT) [dB] | Loss) [dB] | (unFitted) [Ohm] | 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 (CM, CMX-Outdoor), 600 V (AWM 20626)

Mechanical Characteristics

Temperature

| UL Temperature | Operating | Installation | Storage |
|----------------|----------------|----------------|----------------|
| 75°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: | 45 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 |
| NEC / UL Compliance: | Article 800, CM, CMX-Outdoor, ITC, PLTC |
| AWM Compliance: | AWM 20626 |
| CEC / C(UL) Compliance: | CMX-Outdoor |
| 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 |
| 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. |
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History

| Update and Revision: | Revision Number: 0.426 Revision Date: 04-29-2024 | |
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Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC/EAN |
|---------------|-----------------|------------|--------|---------------|
| 7962A+0085 | Green | Reel | 85 m | 8719605196156 |
| 7962A.00305 | Green | Reel | 305 m | 8719605016812 |
| 7962A.00610 | Green | Reel | 610 m | 8719605016829 |
| 7962A 1SW1000 | Green, RAL 6018 | | | 612825367024 |
| 7962A 1SW2000 | Green, RAL 6018 | | | 612825367031 |

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