



Product: [10GAR](#)

10GAR Category 6A U/UTP 4Pair, 23AWG, PVC Jacket Riser-CMR

Product Description

23 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, twisted pairs, central spline, overall cabling PET tape, special barrier tape, PVC jacket

Technical Specifications

Product Overview

| | |
|------------------------|---|
| Suitable Applications: | Horizontal and building backbone Cable. Support current and future category 6 and 6A applications: such as 10GBase-T (10 Gigabit Ethernet), 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, ISDN, ATM as well as PoE application etc. |
|------------------------|---|

Construction Details

Conductor

| Size | Stranding | Material | No. of Pairs |
|--------|-----------|------------------|--------------|
| 23 AWG | Solid | BC - Bare Copper | 4 |

Insulation

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

Outer Jacket

| Material | PVC - Polyvinyl Chloride |
|-----------------------------------|--------------------------|
| Overall Cable Diameter (Nominal): | 7.0 mm (0.28 in) |

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. Capacitance Unbalance |
|------------------------|----------------------------|
| 93.8 Ohms/km@ 20 Deg.C | 330 pF/100m |

Delay

| Max. Delay Skew |
|-----------------|
| 45 ns/100m |

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. PSNEXT [dB] | Min. ACRF (ELFEXT) [dB] | Min. PSACRF (PSELFEXT) [dB] | Min. RL (Return Loss) [dB] |
|-----------------|-----------------------------------|----------------|------------------|-------------------------|-----------------------------|----------------------------|
| 1 | 2.1 dB/100m | 74.3 | 72.3 | 68.0 | 65.0 | 20.0 |
| 4 | 3.8 dB/100m | 65.3 | 63.3 | 56.0 | 53.0 | 23.0 |
| 10 | 5.9 dB/100m | 59.3 | 57.3 | 48.0 | 45.0 | 25.0 |
| 16 | 7.5 dB/100m | 56.2 | 54.2 | 44.0 | 41.0 | 25.0 |
| 31.25 | 10.5 dB/100m | 51.9 | 49.9 | 38.0 | 35.0 | 23.6 |
| 62.5 | 15.0 dB/100m | 47.4 | 45.4 | 32.0 | 29.0 | 21.5 |
| 100 | 19.1 dB/100m | 44.3 | 42.3 | 28.0 | 25.0 | 20.1 |
| 200 | 27.6 dB/100m | 39.8 | 37.8 | 22.0 | 19.0 | 18.0 |
| 250 | 31.1 dB/100m | 38.3 | 36.3 | 20.0 | 17.0 | 17.3 |

| | | | | | | |
|-----|--------------|------|------|------|------|------|
| 300 | 34.3 dB/100m | 37.1 | 35.1 | 18.0 | 15.0 | 16.8 |
| 400 | 40.1 dB/100m | 35.3 | 33.3 | 16.0 | 13.0 | 15.9 |
| 500 | 45.3 dB/100m | 33.8 | 31.8 | 14.0 | 11.0 | 15.2 |

Voltage

| UL Voltage Rating |
|-------------------|
| 72 V DC |

Mechanical Characteristics

Temperature

| Operating | Installation | Storage |
|----------------|--------------|----------------|
| -20°C To +75°C | 0°C To +60°C | -20°C To +75°C |

Bend Radius

| Installation Min. |
|-------------------|
| 15×OD |

| | |
|--------------------|------------------------------|
| Max. Pull Tension: | 110 N (25 lbf) |
| Bulk Cable Weight: | 48.7 kg/km (32.7 lbs/1000ft) |

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Riser, Indoor |
| Flammability / Reaction to Fire: | UL 1666 CMR |
| IEEE Compliance: | IEEE 802.3bt Type 1, Type 2, Type 3, Type 4 |
| Data Category: | Category 6A |
| TIA/EIA Compliance: | TIA 568.2-D |
| ISO/IEC Compliance: | ISO/IEC 11801-1, IEC 61156-5 |
| European Directive Compliance: | EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2) |

Product Notes

| | |
|--------|----------------------|
| Notes: | Special barrier tape |
|--------|----------------------|

History

| | |
|----------------------|---|
| Update and Revision: | Revision Number: 0.13 Revision Date: 04-29-2025 |
|----------------------|---|

Part Numbers

Variants

| Item # | Color | Putup Type |
|---------------|--------|------------|
| 10GAR 006305M | Blue | 305 M |
| 10GAR 008305M | Gray | 305 M |
| 10GAR 009305M | White | 305 M |
| 10GAR 004305M | Yellow | 305 M |

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