



**Product:** [8214](#)

50 Ohm Wireless Transmission Coax, RG-8, 11 AWG Str BC, 95% BC Braid, PVC Jkt, CM

**Product Description**

50 Ohm Wireless Transmission Coax, RG-8, 11 AWG (7x19) Bare Copper Conductor , PE Insulation, 95% Bare Copper Braid Shield, PVC Jacket, CM

**Technical Specifications**

**Product Overview**

|                        |  |
|------------------------|--|
| Suitable Applications: | Point-to-point and point-to-multipoint wireless antenna communication; Wireless microphones, Two-Way Radios, Amateur (Ham) Radio, Low Power FM, GPS, RFID (Radio Frequency Identification) |
|------------------------|--|

**Construction Details**

|          |   |
|----------|---|
| RG Type: | 8 |
|----------|---|

**Conductor**

| Size   | Stranding | Nom. Diameter | Material         |
|--------|-----------|---------------|------------------|
| 11 AWG | 7x19      | 0.108 in      | BC - Bare Copper |

**Insulation**

| Material                 | Nom. Insulation Diameter | Color Code |
|--------------------------|--------------------------|------------|
| PE - Polyethylene (Foam) | 0.285 in (7.24 mm)       | White      |

**Outer Shield**

| Outer Shield Type | Material         | Coverage |
|-------------------|------------------|----------|
| Braid             | Bare Copper (BC) | 95%      |

**Outer Jacket**

| Material                 | Nom. Diameter      |
|--------------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.403 in (10.2 mm) |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.403 in (10.2 mm) |
|-----------------------------------|--------------------|

**Electrical Characteristics**

**Attenuation**

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz     | 0.14 dB/100ft    |
| 10 MHz    | 0.5 dB/100ft     |
| 50 MHz    | 1.2 dB/100ft     |
| 100 MHz   | 1.7 dB/100ft     |
| 200 MHz   | 2.6 dB/100ft     |
| 400 MHz   | 3.9 dB/100ft     |
| 700 MHz   | 5.6 dB/100ft     |
| 900 MHz   | 6.5 dB/100ft     |
| 1000 MHz  | 7.0 dB/100ft     |
| 4000 MHz  | 21.5 dB/100ft    |

**Electricals**

| Nom. Conductor DCR | Nom. Outer Shield DCR | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|--------------------|-----------------------|---------------------------------|-------------------------------|------------------------|
|--------------------|-----------------------|---------------------------------|-------------------------------|------------------------|

|                |                             |                    |        |     |
|----------------|-----------------------------|--------------------|--------|-----|
| 1.2 Ohm/1000ft | 1.1 Ohm/1000ft (3.6 Ohm/km) | 26 pF/ft (85 pF/m) | 50 Ohm | 78% |
|----------------|-----------------------------|--------------------|--------|-----|

Voltage

| UL Voltage Rating              |
|--------------------------------|
| 300 V (CM), 30 V (UL AWM 1354) |

Mechanical Characteristics

Temperature

| UL Temperature     | Operating      |
|--------------------|----------------|
| 60°C (UL AWM 1354) | -40°C to +80°C |

Bend Radius

| Installation Min. |
|-------------------|
| 4.0 in (100 mm)   |

|                    |                  |
|--------------------|------------------|
| Max. Pull Tension: | 230 lbs (100 kg) |
| Bulk Cable Weight: | 107 lbs/1000ft   |

Standards and Compliance

|                                |   |
|--------------------------------|---|
| Environmental Suitability:     | Indoor/Outdoor, Indoor, Aerial - Black only, When supported by messenger wire   |
| Sustainability:                | CA Prop 65  |
| CPR Compliance:                | CPR Euroclass: Eca  |
| NEC / UL Compliance:           | CM  |
| AWM Compliance:                | AWM 1354  |
| CEC / C(UL) Compliance:        | CM  |
| European Directive Compliance: | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| UK Regulation Compliance:      | UKCA Mark   |
| APAC Compliance:               | China RoHS II (GB/T 26572-2011)   |

History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.379 Revision Date: 04-29-2024 |
|----------------------|--|

Part Numbers

Variants

| Item #       | Color | Putup Type | Length   | UPC          | Footnote |
|--------------|-------|------------|----------|--------------|----------|
| 8214 010100  | Black | Reel       | 100 ft   | 612825196228 | C        |
| 8214 010500  | Black | Reel       | 500 ft   | 612825358015 | C        |
| 8214 0101000 | Black | Reel       | 1,000 ft | 612825196235 | C        |

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