

# CNT-600-FR

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CNT-600-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Dca s2 d2 Compliant



## Product Classification

|                       |                       |
|-----------------------|-----------------------|
| <b>Brand</b>          | CNT®                  |
| <b>Product Series</b> | CNT-600               |
| <b>Product Type</b>   | Braided coaxial cable |

## Standards And Qualifications

|                                    |               |
|------------------------------------|---------------|
| <b>EN50575 CPR Cable EuroClass</b> | Dca   s2   d2 |
|------------------------------------|---------------|

## Construction Materials

|                                 |  |
|---------------------------------|--|
| <b>Jacket Color</b>             | Black                                      |
| <b>Jacket Material</b>          | Non-halogenated, fire retardant polyolefin |
| <b>Braid Material</b>           | Tinned copper                              |
| <b>Shield Tape Material</b>     | Aluminum                                   |
| <b>Dielectric Material</b>      | Foam PE                                    |
| <b>Inner Conductor Material</b> | Copper-clad aluminum wire                  |

## Dimensions

|                                 |                       |
|---------------------------------|-----------------------|
| <b>Cable Weight</b>             | 0.13 kg/m             |
| <b>Diameter Over Dielectric</b> | 11.560 mm   0.455 in  |
| <b>Diameter Over Jacket</b>     | 14.990 mm   0.590 in  |
| <b>Inner Conductor OD</b>       | 4.4700 mm   0.1760 in |
| <b>Nominal Size</b>             | 0.600 in              |
| <b>Outer Conductor OD</b>       | 12.500 mm   0.492 in  |

## Electrical Specifications

|                                       |                        |
|---------------------------------------|------------------------|
| <b>Cable Impedance</b>                | 50 ohm                 |
| <b>Capacitance</b>                    | 76.0 pF/m   23.2 pF/ft |
| <b>dc Resistance, Inner Conductor</b> | 1.740 ohms/km          |
| <b>dc Resistance, Outer Conductor</b> | 3.940 ohms/km          |

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|   |               |
|---|---------------|
| <b>dc Test Voltage</b>                  | 4600 V        |
| <b>Jacket Spark Test Voltage (rms)</b>  | 8000 V        |
| <b>Maximum Frequency</b>                | 10.20 GHz     |
| <b>Operating Frequency Band</b>         | 30 – 6000 MHz |
| <b>Peak Power</b>                       | 40.0 kW       |
| <b>Shielding Effectiveness, minimum</b> | 90 dB         |
| <b>Velocity</b>                         | 87 %          |

## Environmental Specifications

|                                 |                                      |
|---------------------------------|--------------------------------------|
| <b>Installation Temperature</b> | -40 °C to +60 °C (-40 °F to +140 °F) |
| <b>Operating Temperature</b>    | -40 °C to +60 °C (-40 °F to +140 °F) |
| <b>Storage Temperature</b>      | -40 °C to +60 °C (-40 °F to +140 °F) |

## General Specifications

|                       |         |
|-----------------------|---------|
| <b>Cable Type</b>     | CNT-600 |
| <b>Braid Coverage</b> | 90 %    |
| <b>Packaging Type</b> | Reel    |

## Mechanical Specifications

|   |                     |
|---|---------------------|
| <b>Bending Moment</b>                   | 3.7 N-m   2.7 ft lb |
| <b>Fire Retardancy Test Method</b>      | UL VW1/CATVX        |
| <b>Flat Plate Crush Strength</b>        | 1.1 kg/mm           |
| <b>Minimum Bend Radius, Single Bend</b> | 38.10 mm   1.50 in  |
| <b>Smoke Index Test Method</b>          | IEC 61034           |
| <b>Tensile Strength</b>                 | 159 kg   351 lb     |
| <b>Toxicity Index Test Method</b>       | IEC 60754-2         |

## Electrical Performance

| <b>Frequency</b> | <b>Attenuation (dB/100 m)</b> | <b>Attenuation (dB/100 ft)</b> |
|------------------|-------------------------------|--------------------------------|
| 30 MHz           | 1.60                          | 0.49                           |
| 50 MHz           | 1.97                          | 0.60                           |
| 150 MHz          | 3.20                          | 0.97                           |
| 220 MHz          | 3.80                          | 1.17                           |
| 450 MHz          | 5.60                          | 1.71                           |
| 900 MHz          | 8.20                          | 2.50                           |
| 1500 MHz         | 10.80                         | 3.30                           |
| 1800 MHz         | 12.10                         | 3.70                           |
| 2000 MHz         | 12.80                         | 3.90                           |
| 2400 MHz         | 14.44                         | 4.40                           |
| 2500 MHz         | 14.80                         | 4.50                           |
| 3000 MHz         | 16.40                         | 5.00                           |
| 4000 MHz         | 19.36                         | 5.90                           |

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|          |       |      |
|----------|-------|------|
| 4500 MHz | 21.00 | 6.40 |
| 5000 MHz | 22.31 | 6.80 |
| 5200 MHz | 22.97 | 7.00 |
| 5500 MHz | 23.62 | 7.20 |
| 5800 MHz | 24.28 | 7.40 |
| 6000 MHz | 24.93 | 7.60 |

\* Values typical, guaranteed within 5%

## Regulatory Compliance/Certifications

### Agency

RoHS 2011/65/EU

ISO 9001:2015

China RoHS SJ/T 11364-2014

CENELEC

### Classification

Compliant

Designed, manufactured and/or distributed under this quality management system

Below Maximum Concentration Value (MCV)

EN 50575 compliant, Declaration of Performance (DoP) available

