

# CNT-300-FR

CNT-300-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-300
<b>Product Type</b>	Braided coaxial cable

## Standards And Qualifications

<b>EN50575 CPR Cable EuroClass</b>	Dca   s2   d2
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## 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

## Dimensions

<b>Cable Weight</b>	0.08 kg/m
<b>Diameter Over Dielectric</b>	4.830 mm   0.190 in
<b>Diameter Over Jacket</b>	7.620 mm   0.300 in
<b>Diameter Over Tape</b>	5.004 mm   0.197 in
<b>Inner Conductor OD</b>	1.7800 mm   0.0700 in
<b>Nominal Size</b>	0.300 in
<b>Outer Conductor OD</b>	5.660 mm   0.223 in

## Electrical Specifications

<b>Cable Impedance</b>	50 ohm
<b>Capacitance</b>	80.4 pF/m   24.5 pF/ft
<b>dc Resistance, Inner Conductor</b>	6.960 ohms/km   2.120 ohms/kft

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<b>dc Resistance, Outer Conductor</b>	8.500 ohms/km   2.591 ohms/kft
<b>dc Test Voltage</b>	2500 V
<b>Jacket Spark Test Voltage (rms)</b>	3500 V
<b>Maximum Frequency</b>	24.50 GHz
<b>Operating Frequency Band</b>	30 – 6000 MHz
<b>Peak Power</b>	10.0 kW
<b>Shielding Effectiveness, minimum</b>	90 dB
<b>Velocity</b>	83 %

## 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-300
<b>Braid Coverage</b>	87 %
<b>Packaging Type</b>	Reel

## Mechanical Specifications

<b>Bending Moment</b>	0.5 N-m   0.4 ft lb
<b>Flat Plate Crush Strength</b>	0.5 kg/mm   30.0 lb/in
<b>Minimum Bend Radius, Single Bend</b>	22.20 mm   0.88 in
<b>Smoke Index Test Method</b>	IEC 61034
<b>Tensile Strength</b>	55 kg   120 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	3.80	1.16
50 MHz	4.90	1.50
150 MHz	7.90	2.40
220 MHz	9.50	2.90
450 MHz	13.10	4.00
900 MHz	19.40	5.90
1500 MHz	25.30	7.70
1800 MHz	28.20	8.60
2000 MHz	29.80	9.10
2500 MHz	33.80	10.30
3000 MHz	37.40	11.40
3500 MHz	41.50	12.65
4000 MHz	44.61	13.60

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4500 MHz	47.75	14.55
5000 MHz	50.52	15.40
5200 MHz	51.83	15.80
5500 MHz	53.14	16.20
5800 MHz	54.78	16.70
6000 MHz	55.80	17.00

## 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

