

# CNT-300-FR

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CNT-300-FR, CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, Dca s2 d2 Compliant



## Product Classification

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

## General Specifications

<b>Braid Coverage</b>	87 %
<b>Cable Type</b>	CNT-300
<b>Jacket Color</b>	Black

## Dimensions

<b>Diameter Over Dielectric</b>	4.83 mm   0.19 in
<b>Diameter Over Jacket</b>	7.62 mm   0.3 in
<b>Diameter Over Tape</b>	5.003 mm   0.197 in
<b>Inner Conductor OD</b>	1.78 mm   0.07 in
<b>Outer Conductor OD</b>	5.66 mm   0.223 in
<b>Nominal Size</b>	0.300 in

## Electrical Specifications

<b>Cable Impedance</b>	50 ohm
<b>Capacitance</b>	80.4 pF/m   24.506 pF/ft
<b>dc Resistance, Inner Conductor</b>	6.96 ohms/km   2.121 ohms/kft
<b>dc Resistance, Outer Conductor</b>	8.5 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>	24.5 GHz

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<b>Operating Frequency Band</b>	30 – 6000 MHz
<b>Peak Power</b>	10 kW
<b>Shielding Effectiveness</b>	90 dB
<b>Velocity</b>	83 %

## Attenuation

<b>Frequency (MHz)</b>	<b>Attenuation (dB/100 m)</b>	<b>Attenuation (dB/100 ft)</b>
30.0	3.8	1.16
50.0	4.9	1.5
150.0	7.9	2.4
220.0	9.5	2.9
450.0	13.1	4
900.0	19.4	5.9
1500.0	25.3	7.7
1800.0	28.2	8.6
2000.0	29.8	9.1
2500.0	33.8	10.3
3000.0	37.4	11.4
3500.0	41.5	12.65
4000.0	44.61	13.6
4500.0	47.75	14.55
5000.0	50.52	15.4
5200.0	51.83	15.8
5500.0	53.14	16.2
5800.0	54.78	16.7
6000.0	55.8	17

## Material Specifications

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

## Mechanical Specifications

<b>Minimum Bend Radius, single Bend</b>	0.88 in   22.352 mm
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<b>Tensile Strength</b>	55 kg   121.254 lb
<b>Bending Moment</b>	0.5 N-m   4.425 in lb
<b>Flat Plate Crush Strength</b>	0.5 kg/mm   27.999 lb/in

## 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)
<b>EN50575 CPR Cable EuroClass</b>	Dca   d2   s2
<b>Smoke Index Test Method</b>	IEC 61034
<b>Toxicity Index Test Method</b>	IEC 60754-2

## Packaging and Weights

<b>Cable weight</b>	0.08 kg/m   0.579 lb/ft
<b>Packaging Type</b>	Reel

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant

