CNT-400 CNT® Jumper with interface type N Male, 6 m



Product Classification

Product Type Braided cable assembly

Product Brand CNT®
Product Series CNT-400

General Specifications

Attachment, Connector A Field attachment

Body Style, Connector A Straight

Cable Family CNT-400

Interface, Connector A N Male

Interface, Connector B Sold separately

Specification Sheet Revision Level A

Dimensions

Length 6 m | 19.685 ft

Nominal Size 0.400 in

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

700–3000 MHz 1.433 14.99

Jumper Assembly Sample Label





Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



Included Products

400APNM-CS8 - Type N Male for CNT-400 braided cable 400PNM-CS8 - Type N Male for CNT-400 braided cable

CNT-400 - CNT-400, CNT® 50 Ohm Braided Coaxial Cable, variable, black PE jacket

CNT-400-SFR - CNT-400-SFR, C CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant

polyolefin jacket, B2ca S1a d0 a1 Compliant

CNT-400-W - CNT-400-W, CNT® 50 Ohm Braided Coaxial Cable, variable, white PE jacket





Type N Male for CNT-400 braided cable

Product Classification

Product Type Braided cable connector

Product Brand CNT® | ConQuest® | QR®

General Specifications

Body Style Straight

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

Interface N Male

Outer Contact Attachment Method Crimp

Outer Contact Plating Trimetal

Dimensions

Width 20.25 mm | 0.797 in

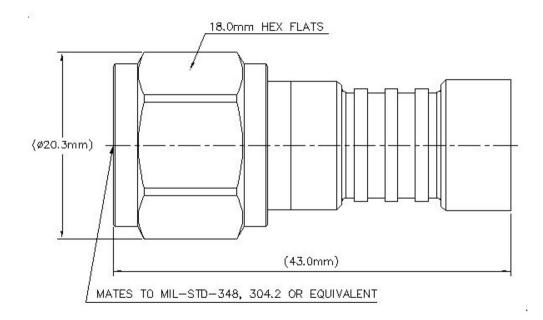
Length 43 mm | 1.693 in

Diameter 20.25 mm | 0.797 in

Nominal Size 0.405 in

Outline Drawing





Electrical Specifications

Insertion Loss, typical 0.05 dB **Cable Impedance** 50 ohm **Connector Impedance** 50 ohm 2500 V dc Test Voltage Inner Contact Resistance, maximum 1 m0hm Insulation Resistance, minimum 5000 MOhm 0 - 6000 MHz **Operating Frequency Band Outer Contact Resistance, maximum** 0.25 m0hm Peak Power, maximum 10 kW RF Operating Voltage, maximum (vrms) 707 V

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.036	35.05
3000-6000 MHz	1.152	23.02

Mechanical Specifications

Connector Retention Tensile Force330 N | 74.187 lbfConnector Retention Torque0.56 N-m | 4.956 in lb

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Coupling Nut Proof Torque1.7 N-m | 15.046 in lbCoupling Nut Proof Torque MethodIEC 61169-16:9.3.6

Coupling Nut Retention Force 450 N | 101.164 lbf

Coupling Nut Retention Force Method IEC 61169-16:9.3.11

Interface Durability 500 cycles

Interface Durability MethodIEC 61169-16:9.5Mechanical Shock Test MethodIEC 60068-2-27

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)

Storage Temperature $-65 \,^{\circ}\text{C}$ to $+125 \,^{\circ}\text{C}$ (-85 $^{\circ}\text{F}$ to $+257 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ Average Power, Ambient Temperature $40 \, ^{\circ}\text{C} \mid 104 \, ^{\circ}\text{F}$

Average Power, Inner Conductor Temperature 100 °C | 212 °F

Climatic Sequence Test Method IEC 60068-1

Corrosion Test Method IEC 60068-2-11

Damp Heat Steady State Test Method IEC 60068-2-3

Immersion Depth1 mImmersion Test MatingMated

Immersion Test Method IEC 60529:2001, IP68

Thermal Shock Test Method IEC 60068-2-14

Vibration Test Method IEC 60068-2-6

Packaging and Weights

Weight, net $32.42 \text{ g} \mid 0.071 \text{ lb}$

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Above maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

ROHS Compliant/Exempted







* Footnotes

Insertion Loss, typical 0.05v⁻freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours





Type N Male for CNT-400 braided cable

Product Classification

Product Type Braided cable connector

Product Brand CNT®

General Specifications

Body Style Straight

Inner Contact Attachment Method Captivated

Inner Contact Plating Silver

Interface N Male

Outer Contact Attachment Method Crimp

Outer Contact Plating Trimetal

Dimensions

Width 22.35 mm | 0.88 in

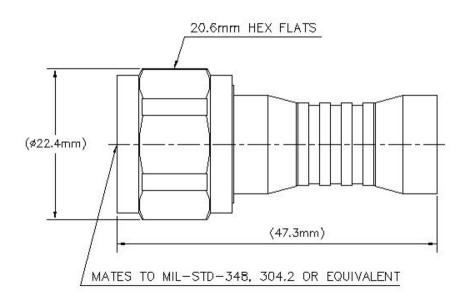
Length 47.3 mm | 1.862 in

Diameter 22.35 mm | 0.88 in

Nominal Size 0.405 in

Outline Drawing





Electrical Specifications

Insertion Loss, typical 0.05 dB **Cable Impedance** 50 ohm **Connector Impedance** 50 ohm 2500 V dc Test Voltage **Inner Contact Resistance, maximum** 1 m0hm Insulation Resistance, minimum 5000 MOhm 0 - 6000 MHz **Operating Frequency Band Outer Contact Resistance, maximum** 0.25 m0hm Peak Power, maximum 10 kW RF Operating Voltage, maximum (vrms) 707 V

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0-3000 MHz	1.065	30.05
3000-6000 MHz	1.119	25.02

Mechanical Specifications

Connector Retention Tensile Force330 N | 74.187 lbfConnector Retention Torque0.56 N-m | 4.956 in lb

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Coupling Nut Proof Torque 1.7 N-m | 15.046 in lb

Coupling Nut Proof Torque Method IEC 61169-16:9.3.6

Coupling Nut Retention Force 450 N | 101.164 lbf

Coupling Nut Retention Force Method IEC 61169-16:9.3.11

Interface Durability 500 cycles

Interface Durability Method IEC 61169-16:9.5

Mechanical Shock Test Method IEC 60068-2-27

Environmental Specifications

Operating Temperature $-40 \, ^{\circ}\text{C} \text{ to } +85 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F to } +185 \, ^{\circ}\text{F})$

Storage Temperature $-65 \,^{\circ}\text{C}$ to $+125 \,^{\circ}\text{C}$ (-85 $^{\circ}\text{F}$ to $+257 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature 20 °C | 68 °F

Average Power, Ambient Temperature 40 °C | 104 °F

Average Power, Inner Conductor Temperature 100 °C | 212 °F

Climatic Sequence Test Method IEC 60068-1

Corrosion Test Method IEC 60068-2-11

Damp Heat Steady State Test Method IEC 60068-2-3

Immersion Depth 1 m

Immersion Test Mating Mated

Immersion Test Method IEC 60529:2001, IP68

Thermal Shock Test Method IEC 60068-2-14

Vibration Test Method IEC 60068-2-6

Packaging and Weights

Weight, net 42.68 g | 0.094 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant





* Footnotes

Insertion Loss, typical 0.05v⁻freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours



CNT-400, CNT® 50 Ohm Braided Coaxial Cable, variable, black PE jacket



Product Classification

Product Type Braided coaxial cable

Product Brand CNT®
Product Series CNT-400

General Specifications

Braid Coverage 90 %

Cable Type CNT-400

Jacket Color Black

Dimensions

Diameter Over Dielectric7.24 mm | 0.285 inDiameter Over Jacket10.29 mm | 0.405 inDiameter Over Tape7.391 mm | 0.291 inInner Conductor OD2.74 mm | 0.108 inOuter Conductor OD8.08 mm | 0.318 in

Nominal Size 0.400 in

Electrical Specifications

Cable Impedance 50 ohm

Capacitance 78 pF/m | 23.774 pF/ft

dc Resistance, Inner Conductor4.69 ohms/km | 1.43 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft

dc Test Voltage $2500 \ \lor$ Jacket Spark Test Voltage (rms) $4000 \ \lor$

COMMSCOPE®

CNT-400

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 - 6000 MHz

Peak Power16 kWShielding Effectiveness90 dBVelocity85 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	2.49	0.76
50.0	3.18	0.97
150.0	4.92	1.5
220.0	6.23	1.9
450.0	8.86	2.7
900.0	12.8	3.9
1500.0	16.7	5.1
1800.0	18.4	5.6
2000.0	19.4	5.9
2400.0	21.65	6.6
2500.0	22	6.7
3000.0	24.6	7.5
4000.0	28.87	8.8
4500.0	30.84	9.4
5000.0	32.81	10
5200.0	33.46	10.2
5500.0	34.78	10.6
5800.0	35.76	10.9
6000.0	36.42	11.1

Material Specifications

Braid Material Tinned copper
Dielectric Material Foam PE

Jacket Material Non-halogenated PE

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum

CNT-400

Mechanical Specifications

 Minimum Bend Radius, single Bend
 25.4 mm | 1 in

 Tensile Strength
 73 kg | 160.937 lb

 Bending Moment
 0.7 N-m | 6.196 in lb

 Flat Plate Crush Strength
 0.7 kg/mm | 39.198 lb/in

Environmental Specifications

Installation temperature-40 °C to +85 °C (-40 °F to +185 °F)Operating Temperature-40 °C to +85 °C (-40 °F to +185 °F)Storage Temperature-70 °C to +85 °C (-94 °F to +185 °F)

Packaging and Weights

Cable weight 0.1 kg/m | 0.067 lb/ft

Regulatory Compliance/Certifications

Agency	Classification
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CHINA-ROHS Below maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant



CNT-400-SFR



CNT-400-SFR, C CNT® 50 Ohm Braided Coaxial Cable, black non-halogenated, fire retardant polyolefin jacket, B2ca S1a d0 a1 Compliant

Product Classification

Product Type Braided coaxial cable

Product Brand CNT®

Product Series CNT-400

General Specifications

Braid Coverage90 %Cable TypeCNT-400Jacket ColorBlack

Dimensions

 Diameter Over Dielectric
 7.24 mm | 0.285 in

 Diameter Over Jacket
 10.29 mm | 0.405 in

 Diameter Over Tape
 7.391 mm | 0.291 in

 Inner Conductor OD
 2.74 mm | 0.108 in

 Outer Conductor OD
 8.08 mm | 0.318 in

Nominal Size 0.400 in

Electrical Specifications

Cable Impedance 50 ohm

Capacitance 78 pF/m | 23.774 pF/ft

dc Resistance, Inner Conductor4.49 ohms/km | 1.369 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft

dc Test Voltage 2500 V

Jacket Spark Test Voltage (rms) 4000 V

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CNT-400-SFR

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 – 6000 MHz

Peak Power16 kWShielding Effectiveness90 dBVelocity85 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	2.49	0.76
50.0	3.18	0.97
150.0	4.92	1.5
220.0	6.23	1.9
450.0	8.86	2.7
900.0	12.8	3.9
1500.0	16.7	5.1
1800.0	18.4	5.6
2000.0	19.4	5.9
2400.0	21.65	6.6
2500.0	22	6.7
3000.0	24.6	7.5
4000.0	28.87	8.8
4500.0	30.84	9.4
5000.0	32.81	10
5200.0	33.46	10.2
5500.0	34.78	10.6
5800.0	35.76	10.9
6000.0	36.42	11.1

Non-halogenated, fire retardant polyolefin

Material Specifications

Jacket Material

Braid Material Tinned copper
Dielectric Material Foam PE

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum



CNT-400-SFR

Mechanical Specifications

Minimum Bend Radius, single Bend 25.4 mm | 1 in

Tensile Strength 73 kg | 160.937 lb

Bending Moment 0.7 N-m | 6.196 in lb

Flat Plate Crush Strength 0.7 kg/mm | 39.198 lb/in

Environmental Specifications

Installation temperature $-40 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ ($-40 \,^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ ($-40 \,^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

Storage Temperature $-40 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ ($-40 \,^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Smoke Index Test Method IEC 61034

Toxicity Index Test Method IEC 60754-2

Packaging and Weights

Cable weight 0.1 kg/m | 0.067 lb/ft

Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system





CNT-400-W

CNT-400-W, CNT® 50 Ohm Braided Coaxial Cable, variable, white PE jacket



Product Classification

Product Type Braided coaxial cable

Product Brand CNT®
Product Series CNT-400

General Specifications

Braid Coverage 90 %

Cable Type CNT-400

Jacket Color White

Dimensions

 Diameter Over Dielectric
 7.24 mm | 0.285 in

 Diameter Over Jacket
 10.29 mm | 0.405 in

 Diameter Over Tape
 7.391 mm | 0.291 in

 Inner Conductor OD
 2.74 mm | 0.108 in

 Outer Conductor OD
 8.08 mm | 0.318 in

 Nominal Size
 0.400 in

Electrical Specifications

Cable Impedance 50 ohm

Capacitance 78 pF/m | 23.774 pF/ft

dc Resistance, Inner Conductor4.69 ohms/km | 1.43 ohms/kftdc Resistance, Outer Conductor5.61 ohms/km | 1.71 ohms/kft

dc Test Voltage 2500 V

Jacket Spark Test Voltage (rms) 4000 V

COMMSCOPE®

CNT-400-W

Maximum Frequency 16.2 GHz

Operating Frequency Band 30 – 6000 MHz

Peak Power16 kWShielding Effectiveness90 dBVelocity85 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	2.49	0.76
50.0	3.18	0.97
150.0	4.92	1.5
220.0	6.23	1.9
450.0	8.86	2.7
900.0	12.8	3.9
1500.0	16.7	5.1
1800.0	18.4	5.6
2000.0	19.4	5.9
2400.0	21.65	6.6
2500.0	22	6.7
3000.0	24.6	7.5
4000.0	28.87	8.8
4500.0	30.84	9.4
5000.0	32.81	10
5200.0	33.46	10.2
5500.0	34.78	10.6
5800.0	35.76	10.9
6000.0	36.42	11.1

Material Specifications

Braid Material Tinned copper
Dielectric Material Foam PE

Jacket Material Non-halogenated PE

Inner Conductor Material Copper-clad aluminum wire

Shield Tape Material Aluminum



CNT-400-W

Mechanical Specifications

Minimum Bend Radius, single Bend 25.4 mm | 1 in

Tensile Strength 73 kg | 160.937 lb

Bending Moment 0.7 N-m | 6.196 in lb

Flat Plate Crush Strength 0.7 kg/mm | 39.198 lb/in

Environmental Specifications

Installation temperature -40 °C to +85 °C (-40 °F to +185 °F)

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ ($-40 \,^{\circ}\text{F}$ to $+185 \,^{\circ}\text{F}$)

Storage Temperature $-70 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-94 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

Packaging and Weights

Cable weight 0.1 kg/m | 0.067 lb/ft

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

