C400-SMQM-35

CNT-400 CNT $\ensuremath{\mathbb{R}}$ Jumper with interface types SMA Male and QMA Male, 10.67 m

Product Classification

Product Type		Braided cable assembly
Product Brand		CNT®
Product Series		CNT-400
General Specifications		
Body Style, Connector A		Straight
Body Style, Connector B		Straight
Cable Family		CNT-400
Interface, Connector A		SMA Male
Interface, Connector B		QMA Male
Specification Sheet Revision Level		А
Dimensions		
Length		10.67 m 35.007 ft
Nominal Size		0.400 in
VSWR/Return Loss		
Frequency Band	VSWR	Return Loss (dB)

Frequency Band VSWR Return 700-3000 MHz 1.433 14.99

Jumper Assembly Sample Label

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C400-SMQM-35



Regulatory Compliance/Certifications

Agency

Classification

ISO 9001:2015

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



Included Products

400PSM-CR	-	SMA 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

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Product Classification

Product Type

Product Brand

General Specifications

Body Style	Straight
Inner Contact Attachment Method	Solder
Inner Contact Plating	Gold
Interface	SMA Male
Outer Contact Attachment Method	Crimp
Outer Contact Plating	Trimetal
Pressurizable	No
Dimensions	
Width	14 mm 0.551 in
Length	32.32 mm 1.272 in
Diameter	14 mm 0.551 in

Outline Drawing

Nominal Size

SMA Male for CNT-400 braided cable

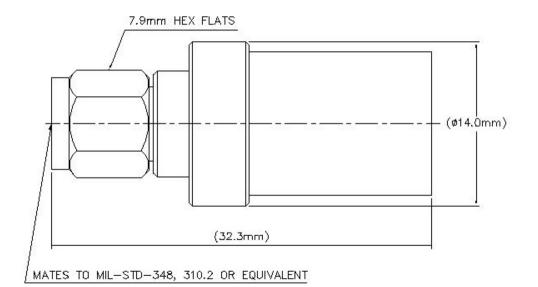
Braided cable connector

CNT®

0.405 in

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Electrical Specifications

Insertion Loss, typical	0.05 dB
Average Power at Frequency	580.0 W @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1000 V
Inner Contact Resistance, maximum	3 m0hm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	2.5 m0hm
Peak Power, maximum	5 kW
RF Operating Voltage, maximum (vrms)	500 V

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–3000 MHz	1.065	30.05
3000-6000 MHz	1.082	28.1

Mechanical Specifications

Connector Retention Tensile Force

330 N | 74.187 lbf



Connector Retention Torque	0.56 N-m 4.956 in lb 0.75 N-m 6.638 in lb	
Coupling Nut Proof Torque	1.7 N-m 15.046 in lb	
Coupling Nut Proof Torque Method	IEC 61169-15:9.3.6	
Coupling Nut Retention Force	180 N 40.466 lbf	
Coupling Nut Retention Force Method	IEC 61169-15:9.3.11	
Insertion Force	22 N 4.946 lbf	
Insertion Force Method	IEC 61169-15:9.3.5	
Interface Durability	500 cycles	
Interface Durability Method	IEC 61169-15:9.5	
Mechanical Shock Test Method	IEC 60068-2-27	

Environmental Specifications

Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-65 °C to +125 °C (-85 °F to +257 °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
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP65

Packaging and Weights

Weight, net

16 g | 0.035 lb

Regulatory Compliance/Certifications

Agency

Classification

ISO 9001:2015

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



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* Footnotes

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

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CNT-400

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



Product Classification

dc Test Voltage

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 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 Conductor	4.69 ohms/km 1.43 ohms/kft
dc Resistance, Outer Conductor	5.61 ohms/km 1.71 ohms/kft
	0.500.14

2500 V Jacket Spark Test Voltage (rms) 4000 V

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CNT-400

Maximum Frequency	16.2 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	16 kW
Shielding Effectiveness	90 dB
Velocity	85 %

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

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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

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ROHS

Classification

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





CNT-400-SFR



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

Product Classification

dc Resistance, Inner Conductor

dc Resistance, Outer Conductor

Jacket Spark Test Voltage (rms)

dc Test Voltage

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 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

4.49 ohms/km | 1.369 ohms/kft 5.61 ohms/km | 1.71 ohms/kft 2500 V 4000 V

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CNT-400-SFR

Maximum Frequency	16.2 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	16 kW
Shielding Effectiveness	90 dB
Velocity	85 %

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, fire retardant polyolefin
Inner Conductor Material	Copper-clad aluminum wire
Shield Tape Material	Aluminum

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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 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d0
EN50575 CPR Cable EuroClass Acidity Rating	a1
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 ISO 9001:2015 EN 50575 compliant, Declaration of Performance (DoP) available Designed, manufactured and/or distributed under this quality management system



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



Jacket Spark Test Voltage (rms)

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 Conductor	4.69 ohms/km 1.43 ohms/kft
dc Resistance, Outer Conductor	5.61 ohms/km 1.71 ohms/kft
dc Test Voltage	2500 V

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4000 V



CNT-400-W

Maximum Frequency	16.2 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	16 kW
Shielding Effectiveness	90 dB
Velocity	85 %

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

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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 °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

ISO 9001:2015

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



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