

# C300-NMTR-1M



CNT-300A CNT® Jumper with interface types N Male and TNC Male  
Right Angle, 1m

## Product Classification

Product Type	Braided cable assembly
Product Brand	CNT®
Product Series	CNT-300

## General Specifications

Attachment, Connector A	Factory attached
Attachment, Connector B	Factory attached
Body Style, Connector A	Straight
Body Style, Connector B	Right angle
Cable Family	CNT-400
Interface, Connector A	N Male
Interface, Connector B	TNC Male
Specification Sheet Revision Level	A

## Dimensions

Length	1 m   3.281 ft
Nominal Size	0.300 in

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
700–2000 MHz	1.288	18
2000–3000 MHz	1.433	14.99

## Jumper Assembly Sample Label

# C300-NMTR-1M



## Included Products

- 300BPNM-C – Type N Male for CNT-300 braided cable
- 300BPTR-C – TNC Male Right Angle for CNT-300 braided cable
- CNT-300A – CNT-300, CNT® 50 Ohm Braided Coaxial Cable, black PE jacket

# 300BPNM-C

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Type N Male for CNT-300 braided cable

## Product Classification

Product Type	Braided cable connector
Product Brand	CNT®

## General Specifications

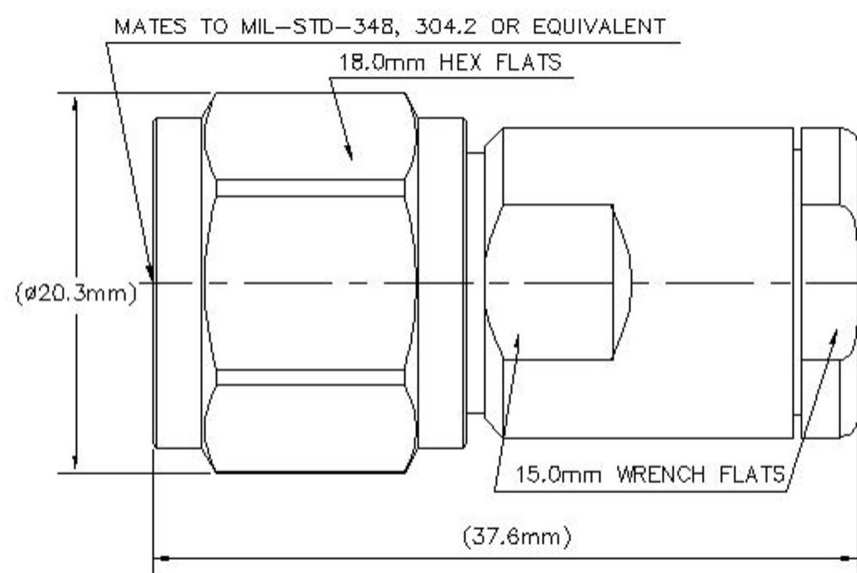
Body Style	Straight
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	N Male
Outer Contact Attachment Method	Clamp
Outer Contact Plating	Trimetal

## Dimensions

Width	20.25 mm   0.797 in
Length	37.6 mm   1.48 in
Diameter	20.25 mm   0.797 in
Nominal Size	0.300 in

## Outline Drawing

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## Electrical Specifications

Insertion Loss, typical	0.05 dB
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	2000 V
Inner Contact Resistance, maximum	1 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	0.25 mOhm
Peak Power, maximum	10 kW
RF Operating Voltage, maximum (vrms)	707 V

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–960 MHz	1.04	34.16
960–1000 MHz	1.04	34.16
1000–2000 MHz	1.05	32.26
2000–6000 MHz	1.12	24.95

## Mechanical Specifications

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Connector Retention Tensile Force	220 N   49.458 lbf
Connector Retention Torque	0.45 N-m   3.983 in lb
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 °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
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	43.59 g   0.096 lb
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## 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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>

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ROHS	Compliant
UK-ROHS	Compliant



\* Footnotes

<b>Insertion Loss, typical</b>	0.05√freq (GHz) (not applicable for elliptical waveguide)
<b>Immersion Depth</b>	Immersion at specified depth for 24 hours

# 300BPTR-C

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TNC Male Right Angle for CNT-300 braided cable

## Product Classification

Product Type	Braided cable connector
Product Brand	CNT®

## General Specifications

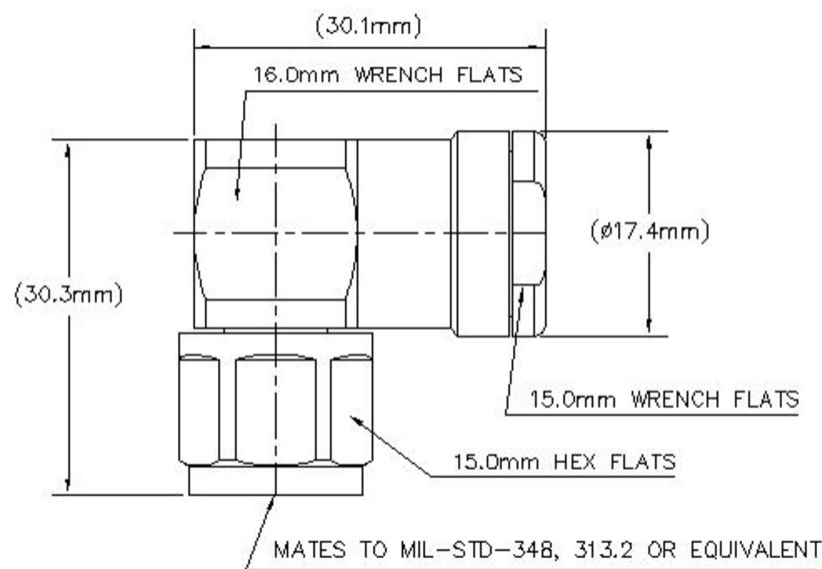
Body Style	Right angle
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Gold
Interface	TNC Male
Outer Contact Attachment Method	Clamp
Outer Contact Plating	Trimetal

## Dimensions

Height	30.31 mm   1.193 in
Width	16.5 mm   0.65 in
Length	30.1 mm   1.185 in
Nominal Size	0.300 in

## Outline Drawing

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## Electrical Specifications

Insertion Loss, typical	0.05 dB
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1500 V
Inner Contact Resistance, maximum	1.5 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	0.4 mOhm
Peak Power, maximum	5 kW
RF Operating Voltage, maximum (vrms)	500 V

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–500 MHz	1.05	32.26
500–1000 MHz	1.052	31.93
1000–2000 MHz	1.069	29.54
2000–3000 MHz	1.08	28.3
3000–4000 MHz	1.069	29.54



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4000–5000 MHz	1.102	26.29
5000–6000 MHz	1.148	23.24

## Mechanical Specifications

Connector Retention Tensile Force	220 N   49.458 lbf
Connector Retention Torque	0.45 N-m   3.983 in lb
Coupling Nut Proof Torque	1.7 N-m   15.046 in lb
Coupling Nut Proof Torque Method	IEC 61169-17:9.3.6
Coupling Nut Retention Force	445 N   100.04 lbf
Coupling Nut Retention Force Method	IEC 61169-17:9.3.11
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-17:9.5
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
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Vibration Test Method	IEC 60068-2-6

## Packaging and Weights

Weight, net	58.49 g   0.129 lb
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## 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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant

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UK-ROHS

Compliant/Exempted



## \* Footnotes

<b>Insertion Loss, typical</b>	0.05√freq (GHz) (not applicable for elliptical waveguide)
<b>Immersion Depth</b>	Immersion at specified depth for 24 hours

# CNT-300A



CNT-300, CNT® 50 Ohm Braided Coaxial Cable, black PE jacket

## Product Classification

Product Type	Braided coaxial cable
Product Brand	CNT®
Product Series	CNT-300

## General Specifications

Braid Coverage	87 %
Cable Type	CNT-300
Jacket Color	Black

## Dimensions

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

## Electrical Specifications

Cable Impedance	50 ohm
Capacitance	80.4 pF/m   24.506 pF/ft
dc Resistance, Inner Conductor	11.05 ohms/km   3.368 ohms/kft
dc Resistance, Outer Conductor	8.5 ohms/km   2.591 ohms/kft
dc Test Voltage	2500 V
Jacket Spark Test Voltage (rms)	3500 V
Maximum Frequency	24.5 GHz
Operating Frequency Band	30 – 6000 MHz
Peak Power	10 kW

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Shielding Effectiveness	90 dB
Velocity	83 %

## Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)
30.0	3.8	1.16
50.0	4.9	1.5
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
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

Braid Material	Tinned copper
Dielectric Material	Foam PE
Jacket Material	PE
Inner Conductor Material	Copper-clad aluminum wire
Shield Tape Material	Aluminum

## Mechanical Specifications

Minimum Bend Radius, single Bend	22.352 mm   0.88 in
Tensile Strength	23 kg   50.706 lb
Bending Moment	0.5 N-m   4.425 in lb
Flat Plate Crush Strength	0.5 kg/mm   27.999 lb/in

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## 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	0.06 kg/m   0.04 lb/ft
Packaging Type	Reel

## 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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

