

# BRAIDED CABLE AND CONNECTOR SOLUTIONS



CONNECTING NEW TECHNOLOGIES



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# CNT™ cable solutions offer many advantages

Global manufacturing and distribution

Customized solutions for special applications

Single source for all your product needs

Flexibility and ease of installation

Universal compatibility

Competitive pricing

For more information contact CNTSales@commscope.com or visit our website at www.commscope.com/andrew

# **CNT Braided Cable and Connector Solutions**

# Connecting New Technologies

#### Get Wired for What's Next

No one can predict the future. But with CNT<sup>TM</sup> Braided Cable and Connector Solutions from CommScope, you'll be prepared for new technologies. CNT, part of the Andrew Solutions portfolio, provides the most complete, cost-effective, high-performance 50 ohm braided cable and connector solutions in the world. Wherever you need a super-flexible, low loss RF cable solution, CNT has the answer.

# **Expect More from the World Leader in Wireless Connectivity**

Our Andrew Solutions brand has a 70-year global legacy of supporting the telecommunications and wireless industries, demonstrating our commitment and experience. We deliver an unparalleled breadth of solutions, including high-quality antennas, feeder cable, accessories, and cable assemblies at competitive prices.

Our unrivaled global manufacturing and distribution infrastructure enables us to swiftly deliver CNT solutions anywhere. CNT products are available factory direct and through our extensive distribution network, making it easy for you to get what you need, on your schedule.

# **Experience Exceptional Service and Support**

CommScope works closely with distribution partners to provide sales, technical, and product support, helping you stay one step ahead of your projects. Our dedication to customer service includes training classes and direct access to CommScope's engineering expertise for answers to all of your technical questions.



# **CNT™ Braided Cable and Connector Solutions**Engineered for Real-World Challenges

CNT is designed to meet real-world challenges anywhere you need robust, low loss braided cable solutions. This super-flexible cable performs reliably in every situation. Featuring industry standard PIM ratings, CNT cables are available in a wide array of sizes and lengths to accommodate every need, including outdoor, direct burial, fire-rated, and plenum.

From in-cabinet to tower and pole feeder runs, CNT provides a complete solution. For microwave backhaul systems, CNT is ideal for both indoor and outdoor unit connections. In-building capabilities include solutions for riser runs and air-handling plenums. You can also rely on CNT for internal component and equipment wiring, base station and antenna jumpers, and rooftop installations. The possibilities are endless.

# CommScope Is There for You at Every Turn

Whether you are a large equipment OEM, communications operator, or small wireless installer, CommScope is there for you at every turn. Our unmatched breadth of solutions—and the applications they enable—are constantly evolving. Our CNT Braided Cable, Connectors, and Assembly products offer comprehensive, versatile solutions that bring everything together, connecting your applications to the technologies of today and tomorrow.

# **CNT Cable Ratings**

Standard - general purpose use

**Riser** – in-building between floors and other non-plenum vertical applications

Fire Retardant – anywhere fire safety is critical, such as in-building vertical risers

**Plenum** – in-building air handling plenums and difficult installation areas

**Direct burial** – exterior rated/ underground feeder applications (CNT-400 only)

#### **CNT Sizes**

CNT-100

ANDREW CNT-400

CNT-195

CNT-240

**CNT-300** 

CNT-400

CNT-500

CNT-600



**CNT-100** | **0.100**" | 50 Ohm

#### **Ordering Information**

Part Number	Description	Jacket	Length
CNT-100	Standard	Non-halogenated PE, black	per order
CNT-100-FR-600M	Fire Retardant	Non-halogenated, fire retardant polyolefin, black	600 m (1969 ft)

#### **General Specifications**

Cable Type CNT-100
Braid Coverage 93% braid
Packaging Type Reel

#### **Construction Materials**

Braid Material Tinned copper
Shield Tape Material Aluminum
Dielectric Material Foam PE
Inner Conductor Material Copper

#### **Dimensions**

 Diameter Over Dielectric
 1.550 mm (0.061 in)

 Diameter Over Jacket
 2.790 mm (0.110 in)

 Inner Conductor OD
 0.4600 mm (0.0181 in)

 Outer Conductor OD
 2.060 mm (0.081 in)

 Nominal Size
 0.100 in

#### **Electrical Specifications**

Cable Impedance 50 ohm Capacitance 102.0 pF/m (31.2 pF/ft) 105.000 ohms/km dc Resistance, Inner Conductor (32.000 ohms/kft) dc Resistance, Outer Conductor 28.200 ohms/km (8.600 ohms/kft) 500 V dc Test Voltage Jacket Spark Test Voltage (rms) 1500 V Maximum Frequency 61.00 GHz **Operating Frequency Band** 30-6000 MHz Peak Power 0.6 kW Shielding Effectiveness >90 dB Velocity 66%

#### **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 -40 °C to +85 °C (-94 °F to +185 °F)

#### **Mechanical Specifications**

Bending Moment 0.1 N-m (0.1 ft lb)
Flat Plate Crush Strength 0.2 kg/mm (10.0 lb/in)
Minimum Bend Radius, Single Bend 6.40 mm (0.25 in)
Tensile Strength 7 kg (15 lb)

#### **Performance**

Frequency (MHz)	Attenuation, dB/100 m (dB/100 ft)
30	12.80 (3.90)
50	16.40 (5.00)
150	27.60 (8.40)
220	33.50 (10.20)
450	48.20 (14.70)
900	70.20 (21.40)
1500	93.50 (28.50)
1800	103.60 (31.60)
2000	110.20 (33.60)
2500	125.30 (38.20)
3000	139.40 (42.50)

#### Connectors\*

	Part Number	Description	<b>Attachment Method</b>
_			Inner/Outer Contact
	100PSM-CR	SMA Male	Crimp/Solder
	100PSBF-CR	SMB Female (= Male pin)	Crimp/Solder
	100PSBM-CR	SMB Male (= Female pin)	Crimp/Solder





**CNT-195** | **0.195**" | 50 Ohm

#### **Ordering Information**

Part Number	Description	Jacket	Length
CNT-195	Standard	Non-halogenated PE, black	per order
CNT-195-FR	Fire Retardant	Non-halogenated, fire retardant polyolefin, black	per order
CNT-195-FR-150M		Non-halogenated, fire retardant polyolefin, black	150 m (492 ft)
CNT-195-FR-300M		Non-halogenated, fire retardant polyolefin, black	300 m (984 ft)
CNT-195-FR-600M		Non-halogenated, fire retardant polyolefin, black	600 m (1969 ft)
CNT-195-R	Fire Retardant, Riser Rated	Riser rated, fire retardant PVC, black	per order

#### **General Specifications**

Cable Type	CNT-195
Braid Coverage	89% braid
Packaging Type	Reel

#### **Construction Materials**

Braid Material	Tinned copper
Shield Tape Material	Aluminum
Dielectric Material	Foam PE
Inner Conductor Material	Copper

#### **Dimensions**

Diameter Over Dielectric	2.790 mm (0.110 in)
Diameter Over Jacket	4.950 mm (0.195 in)
Inner Conductor OD	0.9400 mm (0.0370 in)
Outer Conductor OD	3.500 mm (0.138 in)
Nominal Size	0.195 in

#### **Electrical Specifications**

Cable Impedance	50 ohm
Capacitance	79.7 pF/m (24.3 pF/ft)
dc Resistance, Inner Conductor	29.940 ohms/km
	(7.600 ohms/kft)
dc Resistance, Outer Conductor	16.080 ohms/km
	(4.900 ohms/kft)
dc Test Voltage	1500 V
Jacket Spark Test Voltage (rms)	3000 V
Maximum Frequency	37.90 GHz
Operating Frequency Band	30-6000 MHz
Peak Power	2.5 kW
Shielding Effectiveness	>90 dB
Velocity	75%

#### **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)

#### **Mechanical Specifications**

Bending Moment	0.3 N-m (0.2 ft lb)
Flat Plate Crush Strength	0.3 kg/mm (15.0 lb/in)
Minimum Bend Radius, Single Bend	12.70 mm (0.50 in)
Tensile Strength	18 kg (40 lb)

#### Accessories\*

WK-CNT Weatherproofing Kit

#### **Performance**

Frequency (MHz)	Attenuation, dB/100 m (dB/100 ft)	
30	7.20 (2.20)	
50	8.90 (2.70)	
150	14.10 (4.30)	
220	17.10 (5.20)	
450	25.30 (7.70)	
900	37.10 (11.30)	
1500	49.50 (15.10)	
1800	55.10 (16.80)	
2000	58.70 (17.90)	
2500	66.90 (20.40)	
3000	74.80 (22.80)	

#### Connectors\*

Description	Attachment Method Inner/Outer Contact
SMC Male Right Angle	Crimp/Solder
BNC Male Right Angle	Crimp/Solder
Type N Female Right Angle Bulk	head Crimp/Solder
SMC Female Right Angle	Crimp/Solder
MCX Male	Crimp/Solder
TNC Female Bulkhead	Crimp/Solder
QMA Female	Crimp/Solder
BNC Male	Crimp/Solder
SMA Male	Crimp/Solder
SMB Male (= Female pin)	Crimp/Solder
Type N Female Bulkhead	Crimp/Solder
1.0/2.3 DIN Female Bulkhead	Crimp/Solder
TNC Male	Clamp/Solder
SMA Male Right Angle	Crimp/Solder
Type N Male Right Angle	Crimp/Solder
1.0/2.3 DIN Male	Crimp/Solder
QMA Female Panel Mount	Crimp/Solder
Type N Female	Crimp/Solder
TNC Female	Clamp/Solder
SMA Female	Crimp/Solder
AQM Male Right Angle	Crimp/Solder
SMA Female Panel Mount	Crimp/Solder
QDS Male	Crimp/Captivated
1.0/2.3 DIN Male Right Angle	Crimp/Solder
QMA Male	Crimp/Solder
BNC Female Bulkhead	Crimp/Solder
Type N Male	Crimp/Solder
QMA Male Right Angle	Crimp/Solder
SMA Male Right Angle	Crimp/Solder
	SMC Male Right Angle BNC Male Right Angle Type N Female Right Angle MCX Male TNC Female Bulkhead OMA Female BNC Male SMA Male SMB Male (= Female pin) Type N Female Bulkhead 1.0/2.3 DIN Female Bulkhead TNC Male SMA Male Right Angle Type N Female Panel Mount Type N Female SMA Female SMA Female TNC Female SMA Female SMA Female AQM Male Right Angle SMA Female AQM Male Right Angle SMA Female AQM Male Right Angle SMA Female Panel Mount Type N Female SMA Female AQM Male Right Angle SMA Female Panel Mount Type N Male SMA Female Panel Mount Type N Male SMA Female Panel Mount Type N Male SMA Female Bulkhead Type N Male OMA Male Right Angle





**CNT-240 0.240"** 50 Ohm

#### **Ordering Information**

Part Number	Description	Jacket Material	Length
CNT-240	Standard	Non-halogenated PE, black	per order
CNT-240-150M		Non-halogenated PE, black	150 m (492 ft)
CNT-240-300M		Non-halogenated PE, black	300 m (984 ft)
CNT-240-600M		Non-halogenated PE, black	600 m (1969 ft)
CNT-240-W-150M		PVC, white	150 m (492 ft)
CNT-240-W-300M		PVC, white	300 m (984 ft)
CNT-240-W-600M		PVC, white	600 m (1969 ft)
CNT-240-FR-150M	Fire Retardant	Non-halogenated, fire retardant polyolefin, black	150 m (492 ft)
CNT-240-FR-300M		Non-halogenated, fire retardant polyolefin, black	300 m (984 ft)
CNT-240-FR-600M		Non-halogenated, fire retardant polyolefin, black	600 m (1969 ft)
CNT-240-R	Fire Retardant, Riser Rated	Riser rated, fire retardant PVC, black	per order

# **General Specifications**

Cable Type	CNT-240
Braid Coverage	90% braid
Packaging Type	Reel

#### **Construction Materials**

Braid Material	Tinned copper
Shield Tape Material	Aluminum
Dielectric Material	Foam PE
Inner Conductor Material	Copper

#### **Dimensions**

Diameter Over Dielectric	3.810 mm (0.150 in)
Diameter Over Jacket	6.100 mm (0.240 in)
Inner Conductor OD	1.4200 mm (0.0559 in)
Outer Conductor OD	4.520 mm (0.178 in)
Nominal Size	0.240 in

#### **Electrical Specifications**

•	
Cable Impedance	50 ohm
Capacitance	79.8 pF/m (24.4 pF/ft)
dc Resistance, Inner Conductor	3.300 ohms/km
	(10.830 ohms/kft)
dc Resistance, Outer Conductor	3.890 ohms/km
	(12.760 ohms/kft)
dc Test Voltage	1500 V
Jacket Spark Test Voltage (rms)	5000 V
Maximum Frequency	31.00 GHz
Operating Frequency Band	30-6000 MHz
Peak Power	5.6 kW
Shielding Effectiveness	>90 dB
Velocity	83%

#### **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)

#### **Mechanical Specifications**

Bending Moment	0.3 N-m (0.3 ft lb)
Flat Plate Crush Strength	0.4 kg/mm (20.0 lb/in)
Minimum Bend Radius, Single Bend	19.10 mm (0.75 in)
Tensile Strength	36 kg (80 lb)

Frequency (MHz)	Attenuation, dB/100 m (dB/100 ft)	
30	7.20 (2.20)	
50	8.90 (2.70)	
150	14.10 (4.30)	
220	17.10 (5.20)	
450	25.30 (7.70)	
900	37.10 (11.30)	
1500	49.50 (15.10)	
1800	55.10 (16.80)	
2000	58.70 (17.90)	
2500	66.90 (20.40)	
3000	74.80 (22.80)	





**CNT-240 0.240"** 50 Ohm

#### Connectors\*

Part Number	Description	Attachment Method Inner/Outer Contact
240PSM-CS8	SMA Male	Crimp/Captivated
240PMUF-CR	Mini UHF Female	Crimp/Solder
240PDF-BHC-CR	7-16 DIN Female Bulkhead	Crimp/Captivated
240PTR	TNC Male Right Angle	Clamp/Solder
240PNR-CR	Type N Male Right Angle	Crimp/Solder
240PJR-CR	1.0/2.3 DIN Male Right Angle	Crimp/Solder
240PSR-CS8	SMA Male Right Angle	Crimp/Captivated
240PTF-BHC-CR	TNC Female Bulkhead	Crimp/Captivated
240PSF-BHC-CR	SMA Female Bulkhead	Crimp/Captivated
240PJF-BH-CR	1.0/2.3 DIN Female Bulkhead	Crimp/Solder
240PBM-CR	BNC Male	Crimp/Solder
240PSF-CR	SMA Female	Crimp/Solder
240PTM-CR	TNC Male	Crimp/Solder
240PDM-C-CR	7-16 DIN Male Right Angle	Crimp/Captivated
240PTR-CR	TNC Male Right Angle	Crimp/Solder
240APNF-BHC-CR	Type N Female Bulkhead	Crimp/Captivated
240PNF-CR	Type N Female	Crimp/Solder
240PJM-CR	1.0/2.3 DIN Male	Crimp/Solder
240PQM-CR	QMA Male	Crimp/Solder
240APNF-CR	Type N Female	Crimp/Solder
240PTF-C	TNC Female	Clamp/Captivated
240PQMR-C-CR	QMA Male Right Angle	Crimp/Captivated
240PNM-CS8	Type N Male	Crimp/Captivated
240PMU-CR	Mini UHF Male	Crimp/Solder
240PSFR-BH-CR	SMA Female Right Angle Bulkhead	Crimp/Solder
240PDR-CR	7-16 DIN Male Right Angle	Crimp/Solder
240PTFRP-CR	TNC Female Reverse Polarity	Crimp/Solder
240PTMRP-CR	TNC Male Reverse Polarity	Crimp/Solder

#### Accessories\*

WK-CNT

Weatherproofing Kit



CNT-300 0.300"

50 Ohm

#### **Ordering Information**

Part Number	Description	Jacket	Length
CNT-300	Standard	Non-halogenated PE, black	per order
CNT-300-150M		Non-halogenated PE, black	150 m (492 ft)
CNT-300-300M		Non-halogenated PE, black	300 m (984 ft)
CNT-300-600M		Non-halogenated PE, black	600 m (1969 ft)
CNT-300-FRP-1000		PVC, black	305 m ( 1000 ft)
CNT-300-FR-150M	Fire Retardant	Non-halogenated, fire retardant polyolefin, black	150 m (492 ft)
CNT-300-FR-300M		Non-halogenated, fire retardant polyolefin, black	300 m (984 ft)
CNT-300-FR-600M		Non-halogenated, fire retardant polyolefin, black	600 m (1969 ft)
CNT-300-R	Fire Retardant, Riser Rated	Riser rated, fire retardant PVC, black	per order

#### **General Specifications**

Cable Type CNT-300
Braid Coverage 87% braid
Packaging Type Reel

#### **Construction Materials**

Braid Material Tinned copper
Shield Tape Material Aluminum
Dielectric Material Foam PE
Inner Conductor Material Copper

#### **Dimensions**

 Diameter Over Dielectric
 4.830 mm (0.190 in)

 Diameter Over Jacket
 7.620 mm (0.300 in)

 Inner Conductor OD
 1.7800 mm (0.0701 in)

 Outer Conductor OD
 5.660 mm (0.223 in)

 Nominal Size
 0.300 in

#### **Electrical Specifications**

Cable Impedance 50 ohm Capacitance 80.4 pF/m (24.5 pF/ft) dc Resistance, Inner Conductor 6.960 ohms/km (2.120 ohms/kft) dc Resistance, Outer Conductor 7.980 ohms/km (2.430 ohms/kft) dc Test Voltage 2500 V Jacket Spark Test Voltage (rms) 5000 V **Maximum Frequency** 24.50 GHz **Operating Frequency Band** 30-6000 MHz Peak Power 10.0 kW **Shielding Effectiveness** >90 dB Velocity 83%

#### **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)

#### **Mechanical Specifications**

Bending Moment 0.5 N-m (0.4 ft lb)
Flat Plate Crush Strength 0.5 kg/mm (30.0 lb/in)
Minimum Bend Radius, Single Bend 22.00 mm (0.87 in)
Tensile Strength 55 kg (120 lb)

Frequency (MHz)	Attenuation, dB/100 m (dB/100 ft)
30	3.80 (1.16)
50	4.90 (1.50)
150	7.90 (2.40)
220	9.50 (2.90)
450	13.10 (4.00)
900	19.40 (5.90)
1500	25.30 (7.70)
1800	28.20 (8.60)
2000	29.80 (9.10)
2500	33.80 (10.30)
3000	37.40 (11.40)





**CNT-300 0.300"** 50 Ohm

#### Connectors\*

Part Number	Description	Attachment Method Inner/Outer Contact
300PBM-CR	BNC Male	Crimp/Solder
300PNM-CS8	Type N Male	Crimp/Captivated
300APSR-C	SMA Male Right Angle	Clamp/Captivated
300PNF-C-CR	Type N Female	Crimp/Captivated
300APNF-BH-CR	Type N Female Bulkhead	Crimp/Solder
300PSFR-BH-CR	SMA Female Right Angle Bulkhead	Crimp/Solder
300PSR-C-G	SMA Male Right Angle	Clamp/Captivated
300PSF-CR	SMA Female	Crimp/Solder
300PQM-CR	QMA Male	Crimp/Solder
300PSM-C-CR	SMA Male	Crimp/Captivated
300APNM-C	Type N Male	Clamp/Captivated
300PSF-BH-CR	SMA Female Bulkhead	Crimp/Solder
300PTM-C	TNC Male	Clamp/Captivated
300PNR-C	Type N Male Right Angle	Clamp/Captivated
300APTR-CR	TNC Male Right Angle	Crimp/Solder
300PSF-PM-CR	SMA Female Panel Mount	Crimp/Solder
300PNR-CS8	Type N Male Right Angle	Crimp/Captivated
300APTM-C	TNC Male	Clamp/Captivated

#### **Accessories\***

WK-CNT Weatherproofing Kit 223158-4 Standard Grounding Kit



**CNT-400** 

0.400"

50 Ohm

# **Ordering Information**

Part Number	Description	Jacket	Length
CNT-400	Standard	Non-halogenated PE, black	per order
CNT-400-150M		Non-halogenated PE, black	150 m (492 ft)
CNT-400-300M		Non-halogenated PE, black	300 m (984 ft)
CNT-400-600M		Non-halogenated PE, black	600 m (1969 ft)
CNT-400AL-DB-300M		PE, black	300 m (984 ft)
CNT-400AL-DB-500M		PE, black	500 m (1640 ft)
CNT-400-P	Plenum Rated	PVDF, white	per order
CNT-400-FR-150M	Fire Retardant	Non-halogenated, fire retardant polyolefin, black	150 m (492 ft)
CNT-400-FR-300M		Non-halogenated, fire retardant polyolefin, black	300 m (984 ft)
CNT-400-FR-600M		Non-halogenated, fire retardant polyolefin, black	600 m (1969 ft)
CNT-400-R	Fire Retardant, Riser Rated	Riser rated, fire retardant PVC, black	per order
CNT-400-DB-150M	Corrosion Protected	Flooded, PE, black	150 m (492 ft)
CNT-400-DB-300M		Flooded, PE, black	300 m (984 ft)
CNT-400-DB-500M		Flooded, PE, black	500 m (1640 ft)

## **General Specifications**

Cable Type	CNT-400
Braid Coverage	86% braid
Packaging Type	Reel

#### **Construction Materials**

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

#### **Dimensions**

Diameter Over Dielectric	7.240 mm (0.285 in)
Diameter Over Jacket	10.290 mm (0.405 in)
Inner Conductor OD	2.7400 mm (0.1079 in)
Outer Conductor OD	8.080 mm (0.318 in)
Nominal Size	0.400 in

#### **Electrical Specifications**

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Cable Impedance	50 ohm
Capacitance	78.0 pF/m (24.0 pF/ft)
dc Resistance, Inner Conductor	4.490 ohms/km
	(1.370 ohms/kft)
dc Resistance, Outer Conductor	5.610 ohms/km
	(1.710 ohms/kft)
dc Test Voltage	2500 V
Jacket Spark Test Voltage (rms)	8000 V
Maximum Frequency	16.20 GHz
Operating Frequency Band	30-6000 MHz
Peak Power	16.0 kW
Shielding Effectiveness	>90 dB
Velocity	85%

## **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)

#### **Mechanical Specifications**

Bending Moment	0.7 N-m (0.5 ft lb)
Flat Plate Crush Strength	0.7 kg/mm (40.0 lb/in)
Minimum Bend Radius, Single Bend	25.40 mm (1.00 in)
Tensile Strength	73 kg (160 lb)

Frequency (MHz)	Attenuation, dB/100 m (dB/100 ft)
30	2.49 (0.76)
50	3.18 (0.97)
150	4.92 (1.50)
220	6.23 (1.90)
450	8.86 (2.70)
900	12.80 (3.90)
1500	16.70 (5.10)
1800	18.40 (5.60)
2000	19.40 (5.90)
2400	21.65 (6.60)
2500	22.00 (6.70)
3000	24.60 (7.50)
4000	28.87 (8.80)
4500	30.84 (9.40)
5000	32.81 (10.00)
5200	33.46 (10.20)
5500	34.78 (10.60)
5800	35.76 (10.90)
6000	36.42 (11.10)





**CNT-400 0.400"** 50 Ohm

#### Connectors\*

Part Number	Description	Attachment Method Inner/Outer Contact
400PTM-CS8	TNC Male	Crimp/Captivated
400PDM-C	7-16 DIN Male	Clamp/Captivated
400PSM-CR	SMA Male	Crimp/Solder
400PNF-C	Type N Female	Clamp/Captivated
400PDR-CR	7-16 DIN Male Right Angle	Crimp/Solder
400PQMR-CR	QMA Male Right Angle	Crimp/Solder
400APNM-C	Type N Male	Clamp/Captivated
400PNR-C	Type N Male Right Angle	Clamp/Captivated
400PDF-BHC-CR	7-16 DIN Female Bulkhead	Crimp/Captivated
400PBM-CR	BNC Male	Crimp/Solder
400PSMRP-CR	SMA Male Reverse Polarity	Crimp/Solder
400PTR-C	TNC Male Right Angle	Clamp/Captivated
400PNF-BHC	Type N Female Bulkhead	Clamp/Captivated
400PDF-C	7-16 DIN Female	Clamp/Captivated
400PQM-CR	QMA Male	Crimp/Solder
400PDFR-BH	7-16 DIN Female Right Angle Bulkhead	Clamp/Solder
400PSR-CR	SMA Male Right Angle	Crimp/Solder
400PNR-CS8	Type N Male Right Angle	Crimp/Captivated
400PMU-CR	Mini UHF Male	Crimp/Solder
400APNF-C-CR	Type N Female	Crimp/Captivated
400PTM-C	TNC Male	Clamp/Captivated
400PUM	UHF Male	Clamp/Solder
400PNM-CS8	Type N Male	Crimp/Captivated

#### **Accessories\***

WK-CNT Weatherproofing Kit
CPT-BR400-KIT Cable Preparation Tool
223158-4 Standard Grounding Kit



CNT-500

0.500"

50 Ohm

#### **Ordering Information**

Part Number	Description	Jacket Material	Length
CNT-500	Standard	PE, black	per order
CNT-500-R	Fire Retardant, Riser Rated	Riser rated, fire retardant PVC, black	per order

#### **General Specifications**

Cable Type CNT-500
Braid Coverage 90% braid
Packaging Type Reel

#### **Construction Materials**

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

#### **Dimensions**

Diameter Over Dielectric	9.400 mm (0.370 in)
Diameter Over Jacket	12.700 mm (0.500 in)
Inner Conductor OD	3.6100 mm (0.1421 in)
Outer Conductor OD	9.550 mm (0.376 in)
Nominal Size	0.500 in

#### **Electrical Specifications**

Cable Impedance	50 ohm
Capacitance	23.6 pF/m (7.2 pF/ft)
dc Resistance, Inner Conductor	2.690 ohms/km
	( ohms/kft)
dc Resistance, Outer Conductor	4.160 ohms/km
	( ohms/kft)
dc Test Voltage	2500 V
Jacket Spark Test Voltage (rms)	4000 V
Maximum Frequency	10.30 GHz
Operating Frequency Band	30-6000 MHz
Peak Power	22.0 kW
Shielding Effectiveness	
Velocity	86%

#### **Environmental Specifications**

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

#### **Mechanical Specifications**

Bending Moment
Flat Plate Crush Strength
Minimum Bond Bodius Single

Minimum Bend Radius, Single Bend 64.00 mm (2.52 in) Tensile Strength 118 kg (260 lb)

Frequency (MHz)	Attenuation, dB/100 m (dB/100 ft)
50	2.29 (0.70)
150	3.93 (1.20)
220	4.92 (1.50)
450	7.21 (2.20)
900	10.17 (3.10)
1500	13.45 (4.10)
1800	15.00 (4.57)
2000	15.75 (4.80)
2500	18.04 (5.50)





**CNT-600** 0.600" 50 Ohm

#### **Ordering Information**

Part Number	Description	Jacket	Length
CNT-600	Standard	Non-halogenated PE, black	per order
CNT-600-150M		Non-halogenated PE, black	150 m (492 ft)
CNT-600-300M		Non-halogenated PE, black	300 m (984 ft)
CNT-600-500M		Non-halogenated PE, black	500 m (1640 ft)
CNT-600-1000		PE, black	305 m (1000 ft)
CNT-600-FR-150M	Fire Retardant	Non-halogenated, fire retardant polyolefin, black	150 m (492 ft)
CNT-600-FR-300M		Non-halogenated, fire retardant polyolefin, black	300 m (984 ft)
CNT-600-FR-500M		Non-halogenated, fire retardant polyolefin, black	500 m (1640 ft)
CNT-600-R	Fire Retardant, Riser Rated	Riser rated, fire retardant PVC, black	per order
CNT-600-DB-150M	Corrosion Protected	Flooded, PE, black	150 m (492 ft)
CNT-600-DB-300M	Flooded, PE, black	300 m (984 ft)	
CNT-600-DB-500M	Flooded, PE, black	500 m (1640 ft)	

#### **General Specifications**

CNT-600 Cable Type 90% braid **Braid Coverage** Packaging Type Reel

#### **Construction Materials**

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

#### **Dimensions**

Diameter Over Dielectric 11.560 mm 0.455 in) Diameter Over Jacket 14.990 mm (0.590 in) Inner Conductor OD 4.4700 mm (0.1760 in) Outer Conductor OD 12.500 mm (0.492 in) Nominal Size 0.600 in

#### **Electrical Specifications**

Cable Impedance 50 ohm Capacitance 76.0 pF/m (23.2 pF/ft) dc Resistance, Inner Conductor 1.740 ohms/km (0.530 ohms/kft) dc Resistance, Outer Conductor 3.940 ohms/km (1.200 ohms/kft) dc Test Voltage 4600 V Jacket Spark Test Voltage (rms) 8000 V Maximum Frequency 10.20 GHz **Operating Frequency Band** 30-6000 MHz Peak Power 40.0 kW **Shielding Effectiveness** >90 dB Velocity 87%

#### **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)

#### **Accessories\***

WK-CNT Weatherproofing Kit

#### **Mechanical Specifications**

**Bending Moment** 3.7 N-m (2.8 ft lb) Flat Plate Crush Strength 1.1 kg/mm (60.0 lb/in) Minimum Bend Radius, Single Bend 38.10 mm (1.50 in) Tensile Strength 159 kg (350 lb)

#### **Performance**

Frequency (MHz)	Attenuation, dB/100 m (dB/100 ft)
30 MHz	1.60 (0.49 )
50 MHz	1.97 (0.60)
150 MHz	3.20 (0.97)
220 MHz	3.80 (1.17)
450 MHz	5.60 (1.71)
900 MHz	8.20 (2.50)
1500 MHz	10.80 (3.30)
1800 MHz	12.10 (3.70)
2000 MHz	12.80 (3.90)
2400 MHz	14.44 (4.40)
2500 MHz	14.80 (4.50)
3000 MHz	16.40 (5.00)
4000 MHz	19.36 (5.90)
4500 MHz	21.00 (6.40)
5000 MHz	22.31 (6.80)
5200 MHz	22.97 (7.00)
5500 MHz	23.62 (7.20)
5800 MHz	24.28 (7.40)
6000 MHz	24.93 (7.60)
Connectors*	

#### Connectors

Part Number	Description	Attachment Method Inner/Outer Contact
600PDF	7-16 DIN Female	Clamp/Solder
600PDF-C	7-16 DIN Female	Clamp/Captivated
600PDM-C	7-16 DIN Male	Clamp/Captivated
600APNM-C	Type N Male	Clamp/Captivated
600PNR-H	Type N Male Right Angle	Clamp/Solder
600PDR-C	7-16 DIN Male Right Angle	Clamp/Captivated
600PTM-C	TNC Male	Clamp/Captivated
600PNF-BHC	Type N Female Bulkhead	Clamp/Captivated





#### **CNT Cable Assemblies**

Quality, performance and flexibility

CommScope manufactures superior-quality cable assemblies with the performance, flexibility, reliability, and low cost demanded by today's communications systems. CNT cable assemblies for outdoor use are 100% weatherproof, do not require field fitting, and ensure fast installation. Our assemblies for indoor use are available in fire retardant and phase stabilized versions and have quick mate connector options. CommScope even offers customized Andrew assemblies for in-cabinet, indoor, and outdoor applications. Super-flexible CNT cable is ideal for assembly applications in tightbend, difficult-to-reach areas. With excellent intermodulation performance, CNT assemblies can be made to spec for virtually any application. Contact your CommScope representative for volume quotes and custom configurations.

- Global manufacturing and distribution
- Customized solutions for special applications
- Single source for all of your product needs
- Flexibility and ease of installation
- Universal compatibility
- Competitive pricing

Part Number	Cable Type		Connector 1	Connector 2		Length	Description
C400-NMNM-1M5	CNT-400	-	N male	N male	-	1.5 m	CNT-400 Jumper, black, N male and N male, 1.5 m
C195F-SFQMR-3	CNT-195-FR	-	SMA female	QMA male right-angle	-	3 ft	CNT-195 Jumper, fire-retardant, black, SMA female and QMA male right-angle, 3 ft
C195F-JMSF-5	CNT-195-FR	-	1.0/2.3 DIN male	SMA female	-	3 ft	CNT-195 Jumper, fire-retardant, black, 1.0/2.3 DIN male and SMA female, 5 ft
C240-NFNM-2M	CNT-240	-	N female	N male	-	2 m	CNT-240 Jumper, black, N female and N male, 2 m
C240-BDFSM-3	CNT-240	-	7-16 DIN female bulkhead	SMA male	-	3 ft	CNT-240 Jumper, black, 7-16 DIN female bulkhead and SMA male, 3 ft
C300W-NMSM-5M	CNT-300	-	N male	SMA male	-	5 m	CNT-300 Jumper, white, N male and SMA male, 5 m

#### **Available CNT Cable Assemblies**

Cable Type	Description	Part Number	
CNT-100	SMA Male and SMB Male	C100-PSMSB	
CNT-195	BNC Male and BNC Male	C195-BMBM	
CNT-195	TNC Male and TNC Male, variable length	C195D-TMTM	
CNT-195	N Male and N Female	C195F-NMNF	
CNT-195	N Male Right Angle and SMA Male	C195F-NRSM	
CNT-195	N Female and QMA Male Right Angle	C195-NFQMR	
CNT-195	SMA Male Right Angle and N Female	C195-NFSR	
CNT-195	N Female and TNC Male	C195-NFTM	
CNT-195	N Male and N Male	C195-NMNM-(*)	
CNT-195	N Male and SMA Male	C195-NMSM-(*)	
CNT-195	N Male and SMA Male Right Angle	C195-NMSR-(*)	
CNT-195	SMA Male and QMA Male	C195-SMQM	
CNT-195	SMA Male Right Angle and SMA Male	C195-SMSR-(*)	
CNT-195	TNC Male and SMA Male	C195-TMSM	
CNT-240	N Female Bulkhead and TNC Male	C240-BNFTM-(*)	
CNT-240	BNC Male and BNC Male	C240D-BMBM	
CNT-240	7-16 DIN Male and QMA Male Right Angle	C240-DMQMR-(*)	
CNT-240	N Male and TNC Male Right Angle	C240F-NMTR	
CNT-240	N Male Right Angle and N Male Right Angle	C240F-NRNR	
CNT-240	N Female and N Male	C240-NFNM-(*)	
CNT-240	QMA Male Right Angle and N Female	C240-NFQMR	
CNT-240	N Female and SMA Male	C240-NFSM	
CNT-240	N Female and SMA Male Right Angle	C240-NFSR	
CNT-240	N Female and TNC Male Right Angle	C240-NFTR-(*)	
CNT-240	N Male and N Female	C240-NMNF-(*)	

Specifications continued on following page



# CNT™ Braided Cable Assemblies

able Type	Description	Part Number
IT-240	N Male and QMA Male Right Angle	C240-NMQMR-(*)
NT-240	N Male and SMA Male	C240-NMSM-(*)
NT-240	N Male Right Angle and N Female	C240-NRNF
NT-240	N Male Right Angle and QMA Male Right Angle	C240-NRQMR-(*)
NT-240	N Male Right Angle and SMA Male	C240-NRSM
NT-240	TNC Male and TNC Male	C240-PTMTM-(*)
NT-240	QMA Male Right Angle and QMA Male Right Angle	C240-QMRQMR-(*)
NT-240	SMA Female and QMA Male Right Angle	C240-SFQMR-(*)
NT-240 NT-240	SMA Male and QMA Male	
NT-240 NT-240		C240-SMQM-(*)
	SMA Male and QMA Male Right Angle SMA Male and SMA Male Right Angle	C240-SMQMR-(*)
NT-240	0 0	C240-SMSR
NT-240	SMA Male Right Angle and QMA Male Right Angle	C240-SRQMR-(*)
NT-240	SMA Male Right Angle and SMA Male Right Angle	C240-SRSR
NT-240	N Male and SMA Male (White)	C240-W-NMSM-(*)
NT-300	N Male and N Male	C300-NMNM-(*)
NT-300	N Male and N Male (fire retardant)	C300F-NMNM
NT-300	SMA Male Right Angle and TNC Male Right Angle (fire retardant)	C300F-SRTR-(*)
NT-400	7-16 DIN Male and 7-16 DIN Female	C400-DMDF-(*)
NT-400	7-16 DIN Male and 7-16 DIN Male	C400-DMDM
NT-400	N Male and N Male	C400D-NMNM
NT-400	TNC Male and N Female Bulkhead	C400D-TMBNF
NT-400	N Male and N Male Right Angle	C400F-NMNR
NT-400	N Female and 7-16 DIN Male	C400-NFDM
NT-400	N Female and N Male Right Angle	C400-NFNR-(*)
NT-400	N Female and SMA Male Reverse Polarity	C400-NFSMRP-(*)
NT-400	N Male and N Female Bulkhead	C400-NMBNF
NT-400	N Male and 7-16 DIN Male Right Angle	C400-NMDR
NT-400	N Male and N Female	C400-NMNF-(*)
NT-400	N Male and N Male Right Angle	C400-NMNR
NT-400	N Male and QMA Male	C400-NMQM
NT-400	N Male and QMA Male Right Angle	C400-NMQMR-(*)
NT-400	N Male and SMA Male	C400-NMSM
NT-400	N Male and SMA Male Reverse Polarity	C400-NMSMRP-(*)
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NT-400 NT-400	N Male Right Angle and N Male Right Angle	C400-NRNR-(*)
NT-400	TNC Male Right Angle and N Female Bulkhead	C400-TRBNF
NT-400	UHF Male and UHF Male	C400-UMUM
NT-600	7-16 DIN Male and 7-16 DIN FeMARES595	C600-DMDF
NT-600	N Male and N Male	C600F-NMNM
NT-600	N Male and N Male Right Angle	C600F-NMNR
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#### **Custom Cable Solutions**

Quality, performance and flexibility

CommScope is the world leader of Cable and Connectivity Solutions. We have worked diligently over the years to earn the market leading position in coaxial, twisted pair and fiber optic solutions through our focus on quality, global presence and extensive product portfolio. Although we offer unmatched product breadth and depth, we also have the capability to support custom requirements. Our engineering expertise and vast manufacturing experience in facilities across to globe to offer customized cable solutions no matter what the application or target vertical market. CNT™ products are designed for greater reliability and flexibility of application. At CommScope, we work in partnership with our customers to define the needs of the future and we invite you to discuss your own requirements with us.

#### **Ordering Information**

Part Number	Description	Jacket	Length
5ENS4ZH-BR BLACK REEL	Sunlight and Oil Resistant, Category 5e F/UTP Ethernet Cable,	Black	1640 ft (500 m)
	nonplenum, 4 pair count		

#### **General Specifications**

Cable Component Type	Horizontal
Cable Type	F/UTP (shielded)
Pairs, quantity	4
Jacket Color	Black
Conductor Gauge, singles	24 AWG
Conductor Type, singles	Solid
Conductors, quantity	8
Packaging Type	Reel
Product Number	5ENS4ZHBR

#### **Construction Materials**

Conductor Material	Bare copper
Insulation Material	Polyolefin
Jacket Material	Low Smoke Zero Halogen
(LSZH)	
Shield (Braid) Coverage	90%
Shield (Braid) Material	Tinned copper
Shield (Tape) Material	Aluminum/Polyester

#### **Dimensions**

Cable Length	500 m   1640 ft
Cable Weight	63.95 lb/kft
Diameter Over Jacket	6.223 mm   0.245 in
Diameter Over Shield (Braid)	4.953 mm   0.195 in
Jacket Thickness	0.635 mm   0.025 in

#### **Electrical Specifications**

ANSI/TIA Category	5e
dc Resistance Unbalance, maximum	5%
dc Resistance, maximum	9.38 ohms/100 m
Delay Skew	45 ns
Mutual Capacitance	5.6 nF/100 m @ 1 kHz
Nominal Velocity of Propagation (NVP)	69%
Operating Frequency, maximum	100 MHz
Transmission Standards	ANSI/TIA568C.2
Safety Voltage Rating	300 V
Dielectric Strength, minimum	1500 Vac   2500 Vdc

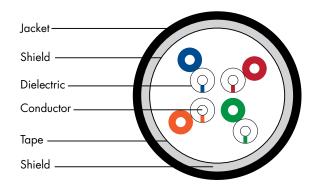
#### **Environmental Specifications**

#### **Mechanical Specifications**

Pulling Tension, maximum 11 kg | 25 lb

#### **Regulatory Compliance/Certifications**

Agency	Classification
RoHS	2002/95/EC Compliant
ISO	9001:2008 Compliant





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