



Antenna Factory, Inc.

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AF-400 Coaxial Cable

The AF-400 communications cable is an ideal substitute for applications requiring low loss RG-8/U & RG-213 jumper cable assemblies. Using industry standard tools and connectors, the ease of connectorization of the Antenna Factory AF-400 will be as simple as 1-2-3.

Cable Description	Part Number
Standard Outdoor Cable, Polyethylene Jacket	AF-400
Watertight Cable, Polyethylene Jacket	AF-400DB
Fire Retardant Cable, Non-Halogenated Jacket	AF-400FR

Mechanical Dimensions	Inches	Millimeters
Diameter over Jacket	0.405	10.29
Overall Braid Diameter	0.320	8.13
Outer Conductor Diameter	0.291	7.39
Dielectric Diameter	0.285	7.24
Inner Conductor Diameter	0.108	2.74

Mechanical Specifications	English	Metric
Minimum Bending Radius	1.0 inch	25.4 mm
Bending Moment	0.5 lb-ft	0.68 N*m
Cable Weight	0.068 lb-ft	0.10 kg/m
Tensile Strength	160 lb.	72.6 kg
Flat Plate Crush Strength	40 lb/in	0.71 kg/mm

Materials of Construction	
Inner Conductor	Solid Bare Copper Clad Aluminum
Dielectric	Foam Polyethylene
Outer Conductor	Aluminum Tape
Overall Braid	Tinned Copper

Environmental Specifications	°C	°F
Operating Temperature	-40 to +85	-40 to + 185
Installation Temperature	-40 to +85	-40 to + 185
Storage Temperature	-70 to +85	-94 to + 185

Electrical Specifications		
Maximum Frequency, GHz	16.1	
Velocity of Propagation	85 %	
Voltage Breakdown	2500 VDC	
Peak Power Rating	16 kW	
DC Resistance		
Inner Conductor, ohms	1.39 / 1000'	4.56 / 1000m
Outer Conductor, ohms	1.65 / 1000'	5.41 / 1000m
Jacket Spark, VRMS	8000	
Capacitance	23.9 pF/ft	78.40 pF/m
Inductance,	0.060 μH/ft	0.20 μH/m
Shielding Effectiveness	>90 dB	
Phase Stability	<10 ppm/°C	

Attenuation and Average Power Ratings

Frequency MHz	Attenuation dB/100 ft	Attenuation dB/100 m	Average Power, kW
30	0.7	2.2	3.30
50	0.9	2.9	2.60
150	1.5	5.0	1.50
220	1.9	6.0	1.20
450	2.7	8.8	0.83
900	3.9	12.7	0.58
1500	5.0	16.6	0.44
1800	5.6	18.4	0.40
2000	5.9	19.4	0.37
2500	6.7	22.0	0.33

Standard Conditions:

For Attenuation: VSWR 1.0, ambient temperature 20°C (68°F).

For Average Power: VSWR 1.0, ambient temperature 40°C (104°F), inner conductor temperature 100°C (212°F), sea level, dry air, atmospheric pressure, no solar loading.



Every effort is made to insure the product specifications are complete and accurate. However, omissions, changes to product specifications and design changes may occur without notice.

AF-400 Connectors

Part Number	Description	Part Number	Description
400AF-NM	N-Male Connector – Straight Body ,Crimp, SGT	400AF-SMAF	SMA Female Connector – Straight Body, Crimp, SGT
400AF-NF	N-Female Connector – Straight Body, Crimp, SGT	400AF-TNCM	TNC Male Connector – Straight Body, Crimp, SGT
400AF-NFBH	N-Female Bulkhead – Straight Body, Crimp, SGT	400AF-TNCF	TNC Female Connector – Straight Body, Crimp, SGT
400AF-SMAM	SMA Male Connector – Straight Body, Crimp, SGT	400AF-BNCM	BNC Male Connector – Straight Body, Crimp, SGT
400AF-SMAMR	SMA Male Connector – Right Angle Body, Crimp	400AF-MUHFM	MINI-UHF Male – Straight Body, Crimp, SGT