



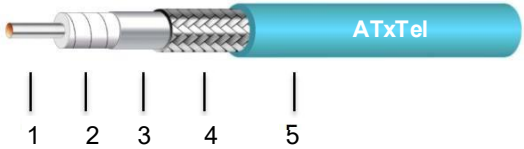
Product Selection Guide

Bulk RF Cable

G Series

Features

- Excellent temperature phase stability
- Mechanical phase stability
- Amplitude stability
- Excellent shielding performance
- Good power handling capability
- Low VSWR



Construction	Materials
1. Center Conductor	Silvered Copper
2. Dielectric	Low Density PTFE
3. Inner Shield	ø
4. Outer Shield	Braided Silvered Copper Wire
5. Jacket	Bluish FPA

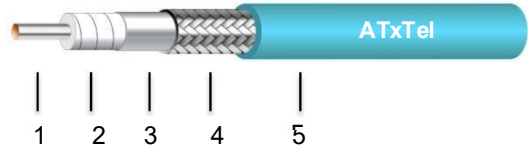
Model	Outer Diameter (mm)	Frequency (GHz)	Impedance (Ohms)	Velocity	Shielding Effectiveness (dB)	Withstand Voltage (V, DC)	Attenuation(dB/100m, Typical Value @25°C & VSWR=1.0)			
							6GHz	8.5GHz	12.4GHz	18GHz
G360	3.60	18	50	76%	90	1000	96.9	116.1	141.5	172.3
G500	5.30	18	50	76%	90	1500	62.1	75.4	93.4	115.9
G800	8.10	18	50	76%	90	2000	40.1	48.9	61	76.3

Product Specifications



Model: G360

Base Low Loss Cable



Construction	Materials	Outer Diameter (mm)
1. Center Conductor	Silvered Copper	0.91
2. Dielectric	Low Density PTFE	2.65
3. Inner Shield	Self-adhesive Aluminum Foil	2.78
4. Outer Shield	Braided Silvered Copper Wire	3.15
5. Jacket	Bluish PFA	3.60

Electrical Specifications

Cable Impedance	50 Ω
Velocity	76%
Shielding Effectiveness	>90 dB
Voltage Withstanding	1000 V DC
Operating Frequency	DC-18 GHz

Mechanical & Environmental Specifications

Weight	29 g/m
Bend Radius, static	18 mm
Bend Radius, dynamic	36 mm
Temperature Range	-55 ~ +125 °C

Attenuation (Typical Value @ 25°C & Sea Level)

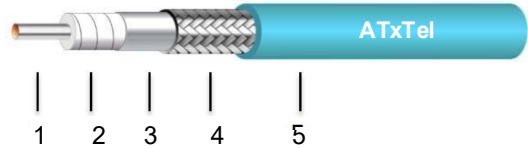
Frequency (MHz)	Power (W)	Attenuation (dB/m)
300	849	0.21
1000	462	0.39
3000	264	0.68
6000	184	0.97
8500	154	1.16
12400	126	1.42
18000	104	1.72

Product Specifications



Model: G500

Base Low Loss Cable



Construction	Materials	Outer Diameter (mm)
1. Center Conductor	Silvered Copper	1.45
2. Dielectric	Low Density PTFE	4.20
3. Inner Shield	Self-adhesive Aluminum Foil	4.32
4. Outer Shield	Braided Silvered Copper Wire	4.65
5. Jacket	Bluish PFA	5.20

Electrical Specifications

Cable Impedance	50 Ω
Velocity	76%
Shielding Effectiveness	>90 dB
Voltage Withstanding	1500 V DC
Operating Frequency	DC-18 GHz

Mechanical & Environmental Specifications

Weight	54 g/m
Bend Radius, static	25 mm
Bend Radius, dynamic	51 mm
Temperature Range	-55 ~ +125 °C

Attenuation (Typical Value @ 25°C & Sea Level)

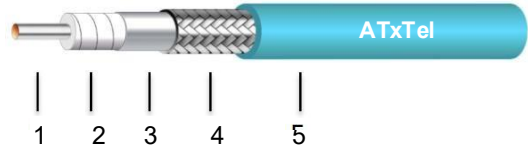
Frequency (MHz)	Power (W)	Attenuation (dB/m)
300	1428	0.13
1000	766	0.24
3000	428	0.43
6000	293	0.62
8500	242	0.75
12400	195	0.93
18000	157	1.16

Product Specifications



Model: G800

Base Low Loss Cable



Construction	Materials	Outer Diameter (mm)
1. Center Conductor	Silvered Copper	2.30
2. Dielectric	Low Density PTFE	6.80
3. Inner Shield	Self-adhesive Aluminum Foil	6.95
4. Outer Shield	Braided Silvered Copper Wire	7.50
5. Jacket	Bluish PFA	8.10

Electrical Specifications

Cable Impedance	50 Ω
Velocity	76%
Shielding Effectiveness	>90 dB
Voltage Withstanding	2000 V DC
Operating Frequency	DC-18 GHz

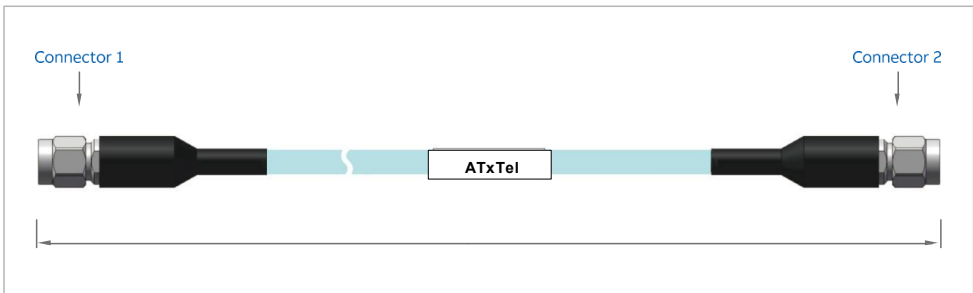
Mechanical & Environmental Specifications

Weight	134 g/m
Bend Radius, static	40 mm
Bend Radius, dynamic	81 mm
Temperature Range	-55 ~ +125 °C

Attenuation (Typical Value @ 25°C & Sea Level)

Frequency (MHz)	Power (W)	Attenuation (dB/m)
300	2766	0.08
1000	1471	0.15
3000	814	0.27
6000	553	0.40
8500	453	0.49
12400	363	0.61
18000	291	0.76

Matching Cables	Matching Connectors											
	SSMP	SMP	SSMA	1.0	1.85	2.4	2.92	3.5	SMA	N	TNC	7/16
G360							●	●	●	●	●	
G500								●	●	●	●	
G800								●	●	●	●	●

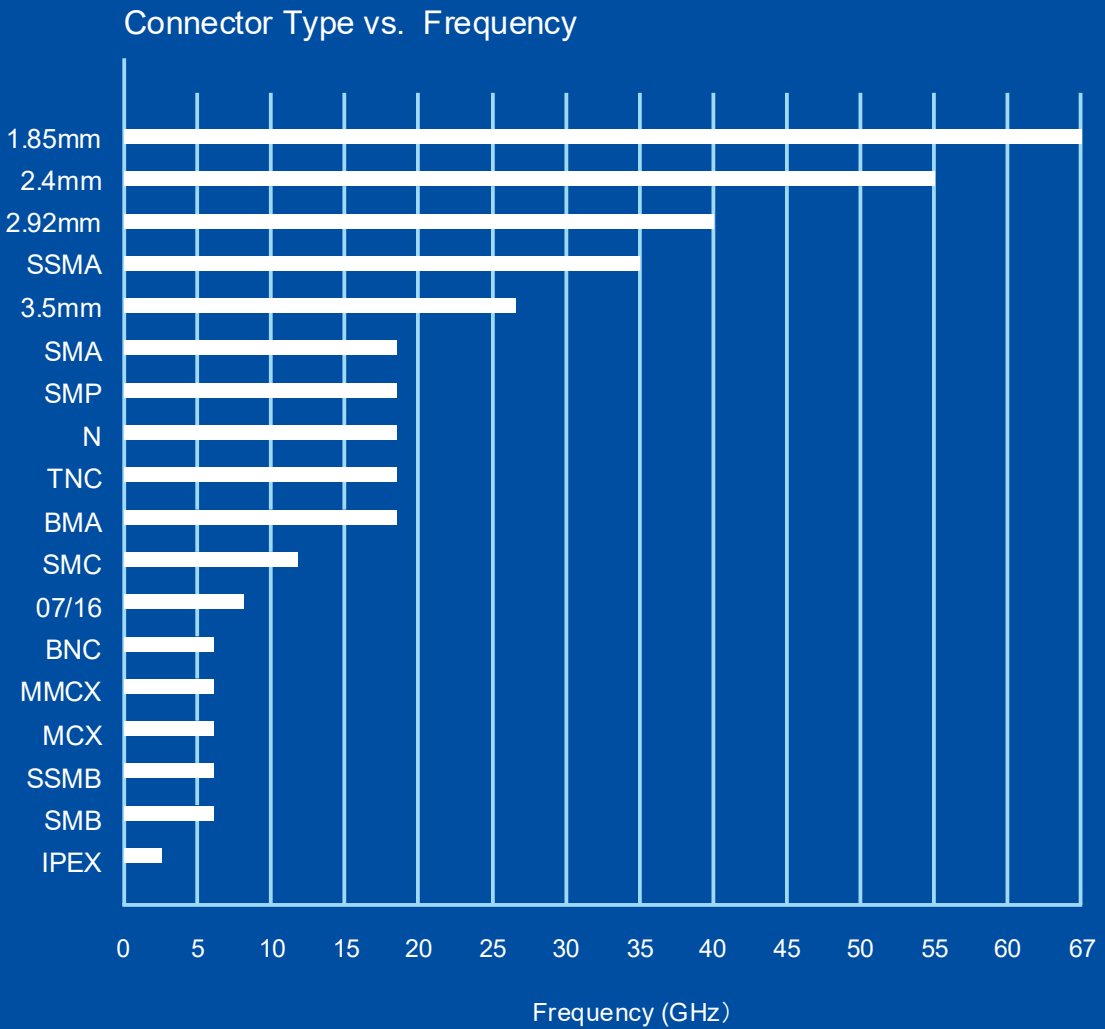


Part Number

ATX-LM-CBL- <u>G360</u> - <u>29 M</u> <u>29 M</u> - <u>1 M</u> - <u>KJ</u>			
Cable Model	Connector Model		Length 1M=1Meter
G360	NM → N Male	INF → N Female	Blank - No Armor KJ - With Armor
G500	SM → SMA Male	SF → SMA Female	
G800	35M → 3.5mm Male	SPM → SMP Male	
	29M → 2.92mm Male	BM → BNC Male	
	24M → 2.4mm Male	TM → TNC Male	
	18M → 1.85mm Male	DM → 7/16 Male	
	10M → 1.0mm male	SPRAF → SMP Female Right Angle	
	25M → SSMA male	SRAM → SMA Male Right Angle	
	25PM → SSMP male		

Note: Different connector types and cable assembly lengths are available. In the continuous effort to improve our products, ATxTel reserves the right to make changes without notice.

Reference



Frequently used information

Insulation Material Characteristics

Material	Dielectric constant	Capacitance	Temperature(°C)
PTFE	2.07	95.9	-75 to +250
Polyethylene	2.3	101.1	-65 to +80
Foam Polyethylene	1.29-1.64	75.72 - 85.38	-65 to +100
Polyvinylchloride	3.0-8.0	115.47 - 188.56	-50 to +105
Polyamide	3.5-4.6	124.72 - 254.73	-60 to +120
Silicone Rubber	2.1-3.5	99.61 - 124.72	-70 to +250
Ethylene Propylene	2.24	99.8	-40 to +105
FEP	2.1	96.6	-70 to +200
Low Density PTFE	1.38-1.73	78.3 - 87.7	-75 to +250
Foam FEP	1.45	80.3	-75 to +200
Polyimide	3.0-3.5	115.5 - 124.7	-75 to +300
PFA	2.1	96.6	-75 to +260
ETFE	2.6	107.5	-75 to +150
ECTFE	2.5	105.4	-65 to +150
PVDF	7.8	186.2	-75 to +125
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Cable outer jacket material working temperature

Material Name	Working temperature (°C)
PTFE	-75 to +250
FEP	-70 to +200
Silicone Rubber	-70 to +200
ETFE	-65 to +150
Nylon	-40 to +105
PUR	-55 to +85
PVC	-50 to +85
PE	-65 to +80
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