

Product Description

- The high performance and low attenuation of this coaxial cable allows it to be used in different RF systems, such as 3G, 4G mobile communication.
- Wide range of applications, such as indoor distribution, broadcast, various base stations, wireless cellular, and others.
- Lower VSWR, perfect shielding effectiveness, and extraordinary PIM performance lead to fewer energy loss and outer interference.



Construction		
Component	Material	Diameter, mm
Inner conductor	Copper-clad Aluminum	4.80±0.05
Insulation	Polyethylene spline	11.80±0.05
Outer conductor	Ring-corrugated Aluminum	13.80±0.05
Jacket	Polyvinylchloride (PVC)	16.00±0.05
Armor	Aluminum	24.0±0.5

Mechanical Characteristics	
Weight (Cable & Shielding), kg/m	0.345
Minimum single bending radius, mm	76.0
Minimum repeated bending radius, mm	127.0
Tensile strength, N	549
Bending moment, N-m	5.4
Crush strength, kg/cm ²	3.52
Recommended maximum clamp spacing, m	1.8

Electrical Properties	
Impedance, Ohms	50±2
Nominal capacitance, pF/m	75.459
Nominal inductance, µH/m	0.19
Propagation velocity, %	88
DC breakdown voltage, kV	6.0
Jacket spark-test voltage, Vrms	5000
Operating frequency band, MHz	6000
Insulation resistance, MOhm-km	10 ⁵
Peak power rating, kW	40
Cutt-off frequency, GHz	kW

Transmission Properties			
Frequency, MHz	Attenuation, dB/100 m	Attenuation, dB/100 ft	Average Power, kW
1.0	0.216	0.066	35.37
1.5	0.264	0.081	28.84
2.0	0.306	0.093	24.95
10.0	0.691	0.211	11.04
20.0	0.985	0.300	7.75
30.0	1.213	0.370	6.29
50.0	1.581	0.482	4.83
85.0	20.87	0.648	3.66
88.0	2.126	0.693	3.59
100.0	2.274	0.722	3.35
108.0	2.368	0.860	3.22
150.0	2.821	0.931	2.70
174.0	3.054	1.003	2.50
200.0	3.292	1.014	2.32
204.0	3.327	1.251	2.29
300.0	4.104	1.465	1.86
400.0	4.808	1.565	1.59
450.0	5.134	1.584	1.49

460.0	5.197	1.584	1.47
500.0	5.445	1.659	1.40
512.0	5.517	1.682	1.38
600.0	6.032	1.839	1.26
700.0	6.583	2.007	1.16
800.0	7.105	2.166	1.07
824.0	7.227	2.203	1.06
894.0	7.574	2.308	1.01
960.0	7.892	2.405	0.97
1000.0	8.081	2.463	0.94
1218.0	9.068	2.764	0.84
1250.0	9.207	2.806	0.83
1500.0	10.256	3.126	0.74
1700.0	11.053	3.369	0.69
1794.0	11.416	3.480	0.67
1800.0	11.439	3.487	0.67
2000.0	12.192	3.716	0.63
2100.0	12.559	3.828	0.61
2200.0	12.920	3.938	0.59
2300.0	13.276	4.046	0.57
2500.0	13.975	4.259	0.55
2700.0	14.656	4.467	0.52
3000.0	15.649	4.770	0.49
3400.0	16.928	5.159	0.45
3600.0	17.551	5.349	0.43
3700.0	17.859	5.443	0.43
3800.0	18.164	5.536	0.42
3900.0	18.467	5.628	0.41
4000.0	18.768	5.72	0.41
4100.0	19.066	5.811	0.40
4200.0	19.363	5.902	0.39
4300.0	19.658	5.991	0.39
4400.0	19.951	6.081	0.38

4500.0	20.241	6.169	0.38
4600.0	20.531	6.257	0.37
4700.0	21.818	6.345	0.37
4800.0	21.108	6.432	0.36
4900.0	21.388	6.519	0.36
5000.0	21.671	6.605	0.35
6000.0	24.420	7.443	0.31

Return Loss	
Frequency Range	VSWR (dB)
700-894MHz	≤1.25(-20)
806-960MHz	≤1.25(-20)
1700-2200MHz	≤1.25(-20)

Environmental Properties	
Recommended storage temperature, °C	-20 to 80
Recommended installation temperature, °C	-5 to 60
Recommended operating temperature, °C	-20 to 80

Ratings/Compliance	
Fire Performance	Flame Retardant, Plenum Rated
Flame retardant Jacket Specifications	CMP/CATVP/NFPA 262
Regulatory Compliance	NEC Article 800 Communication Circuits; ETL Listed to UL444; Canadian CSA C.22.2/FT6 *NFPA 72 section 12.4.2 Pathway Survivability Level 1 **NEC 330.30(B), (C), (D.3)
2011/California Proposition 65/EU(RoHS)	Compliant
REACH-SVHC	Compliant



Armor-Clad, Aluminum-Shielded Coaxial Air-Core Cable

Ordering Information		
Description	Part Number	Spool Length, Feet
Armor-Clad, Aluminum-Shielded Coaxial Air-Core Cable	PLN-AL-50-[Color Code]-CL-SP	1000

[COLOR CODE]: White=WHT, Red=RED

P/N Example: 1000 FT Spool of Red Aluminum-Shielded Aluminum-Clad
Coaxial Air Core Cable: PLN-AL-50-RED-CL-SP