

### Cable Specifications

50 Ohm Plenum Radiating, 1/2"  
Copper Outer Conductor

Description	Product Number
<b>Plenum Cables</b>	
1/2", Corrugated, Jacketed UL-910, CATVP	AQC012J50
<b>Physical Dimensions</b>	
Center Conductor	Copper Clad Aluminum
Outer Conductor	Corrugated Copper
Dia. Over Outer Conductor, in (mm)	0.540 (13.72)
Dia. Over Jacket, in (mm)	0.615 (15.62)
<b>Electrical Characteristics</b>	
Impedance, Ohms	50
Maximum Frequency, GHz	10
Velocity of Propagation	96%
Peak Power Rating, KW	40
DC Res., Ohms/1000 ft (1000m)	
Center	0.46 (1.51)
Outer	0.42 (1.38)
DC Breakdown, kV	4
Jacket Spark, kV RMS	8
Capacitance, pF/ft (m)	22 (72.12)
Inductance, mH/ft (m)	0.057 (0.187)
<b>Mechanical Characteristics</b>	
Min. Bend. Radius, in (mm)	5 (127)
Number of Bends, minimum (typical)	15 (20)
Bending Moment, lb-ft (N.m)	3.0 (4.1)
Cable Weight, lb/ft (kg/m)	0.17 (0.25)
Tensile Strength, lb (kg)	250 (114)
Flat Plate Crush, lb/in (kg/mm)	110 (2.0)
Temperature, °F (°C)	
Recommended Install	+5 to 194 (-15 to 90)
Recommended Storage	+5 to 194 (-15 to 90)
Operating	+5 to 194 (-15 to 90)

Frequency MHz	Attenuation and Coupling Loss		Coupling Loss* dB
	Attenuation dB/100 ft	Attenuation dB/100m	
30	0.50	1.64	55
50	0.65	2.82	55
88	0.86	2.82	55
100	0.92	3.01	55
108	0.95	3.13	56
150	1.12	3.69	56
174	1.21	3.97	63
200	1.30	4.26	63
300	1.59	5.23	63
400	1.84	6.05	63
450	1.96	6.42	63
500	2.06	6.77	64
512	2.09	6.85	64
600	2.26	7.43	64
700	2.45	8.03	64
800	2.62	8.60	64
824	2.66	8.73	64
894	2.77	9.10	64
900	2.78	9.13	65
960	2.87	9.43	65
1000	2.94	9.63	65
1250	3.29	10.79	65
1500	3.61	11.84	66
1700	3.85	12.63	66
1800	3.96	13.00	66
1950	4.13	13.55	66
2000	4.18	13.72	67
2300	4.49	14.74	68
2400	4.59	15.07	68
3000	5.15	16.90	69

**Standard Conditions:**

Test per IEC61196-4

\*50% Coupling Loss at 6 ft (2 m), ± 5 dB

\*\*Attenuation ± 10% at 68°F