

50 Ohm Plenum 1/2" (UL 2196 Certified)

RediComm™ High Temperature 1/2" Plenum - APH012J50-2H

Description	Product Number
Plenum Rated Cable	
1/2", Corrugated, Copper Outer Conductor, Jacketed CMP, Conforms to UL-2196, NFPA-262, UL-444, Canadian CSA 22.2/FT6	APH012J50-2H
Physical Dimensions	
Center Diameter, in (mm)	0.188 (4.78)
Diameter Over Outer Conductor, in (mm)	0.550 (13.97)
Maximum Diameter Over Jacket, in (mm)	0.63 (16.00)
Center Conductor	Solid Copper
Outer Conductor	Corrugated Copper
Jacket Color	Red
Electrical Characteristics	
Maximum Frequency, GHz	1
Peak Power Rating, KW	40
DC Resistance, Ohms/1,000 ft (1,000 m)	
Center	0.29 (0.96)
Outer	0.39 (1.28)
DC Breakdown, kV	2.5
Jacket Spark, kV RMS	8
VSWR min, (dB)	1.50 (14.0)
Impedance, Ohms	50 ± 2
Velocity of Propagation	89%
Mechanical Characteristics	
Minimum Bend Radius, in (mm)	8 (203.2)
Cable Clamp Spacing, ft (m) *	2 (0.61)
Cable Weight, lb/ft (kg/m)	0.27 (0.40)
Bending Moment, ft lb (N m)	4.0 (5.4)
Tensile Strength, lb (kg)	275 (125)
Flat Plate Crush, lb/in (kg/mm)	110 (2.0)
Install Temp., °F (°C)	+5° to 194° (-15° to 90°)
Storage Temp., °F (°C)	+5° to 194° (-15° to 90°)
Operating Temp., °F (°C)	+5° to 194° (-15° to 90°)
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), No Solar Loading	
Regulatory Compliance/Certifications	
RoHS 2011/65/EU Compliant	
NFPA-70, Article 810, Communication Systems, NFPA-72, NFPA-130, NFPA-262 CMP, Canada CSA 22.2/FT6, UL-444, UL 2196 Circuit Integrity	
ETL UL -2196 System Design TCI/SC 120-01 for 27 10 00 Structured Cabling	
TL 9000 H-V - All Cables designed and manufactured under this quality management system	



Attenuation and Average Power			
Frequency, MHz	Attenuation		Average Power kW
	dB/100 ft	dB/100 m	
150	1.12	3.67	4.82
450	2.32	7.61	1.68
600	2.88	9.45	1.46
700	3.20	10.50	1.46
800	3.56	11.68	1.18
900	3.86	12.66	1.18

Certified test results demonstrate the ability of the coaxial cable to maintain RF signal integrity over the duration of the fire test.

* Design Number TCI/SC 120-01 Communications Cable. [Document Link](#)



Trilogy AirCell® Cable
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