



NextPhase™ Stranded Conductor



The NextPhase™ low loss stranded cable line is designed for general purpose interconnects demanding low loss and triple shielding. Applications include ATE, ground- and air-based EW, and many others where reasonable cost and long lengths are required.

A wide variety of diameters are available to accommodate a wide range of design requirements in terms of bend radii, weight and power performance.

Electrical Data

Maximum Frequency:

912S: 50.0 GHz
916S: 40.0 GHz
919S: 28.0 GHz
930S: 18.0 GHz

Impedance:

50 Ω nominal

Propagation Velocity:

912S, 916S: 74.0% nominal
919S: 75.0% nominal
930S: 77.0% nominal

Time Delay:

912S, 919S, 930S: 1.35 ns/ft (4.43 ns/m)
916S: 1.33 ns/ft (4.36 ns/m)

Shielding Effectiveness:

-90 dB minimum (cable only)

Dielectric Withstanding Voltage:

5.0 kV at 60 Hz

Capacitance:

912S: 27.0 pF/ft (88.6 pF/m)
916S: 26.9 pF/ft (88.3 pF/m)
919S, 930S: 26.7 pF/ft (87.6 pF/m)

Mechanical Data

Cable Construction

Inner Conductor: Stranded Ag-plated Cu
Outer Conductor: Ag-plated Cu Flat Braid/
Polyamide Foil/Ag-plated Cu Round Braid
Standard Finish: FEP
Dielectric: PTFE Tape

Finished Outer Diameter:

912S: 0.124 in (0.314 cm)
916S: 0.160 in (0.406 cm)
919S: 0.205 in (0.521 cm)
930S: 0.305 in (0.775 cm)

Static Bend Radius:

912S: 0.6 in (1.524 cm)
916S: 0.9 in (2.286 cm)
919S: 1.1 in (2.794 cm)
930S: 1.8 in (4.572 cm)

Weight:

912S: 0.02 lbs/ft (0.030 kg/m)
916S: 0.04 lbs/ft (0.060 kg/m)
919S: 0.05 lbs/ft (0.074 kg/m)
930S: 0.09 lbs/ft (0.134 kg/m)

Available Connectors:

912S, 916S: SMA, 2.4mm, 2.92mm, 3.5mm,
919S, 930S: SMA, TNC, Type N

Operating Temp. Range:

-85 to 392° F (-65 to 200° C)



Frequency		912S Series		916S Series		919S Series		930S Series		Conn Loss dB	VSWR
GHz	Band	Attenuation		Attenuation		Attenuation		Attenuation			
		dB/ft	dB/m	dB/ft	dB/m	dB/ft	dB/m	dB/ft	dB/m		
UHF	0.3	0.100	0.328	0.069	0.227	0.046	0.152	0.031	0.101	0.006	1.10
	0.5	0.130	0.425	0.090	0.295	0.060	0.197	0.040	0.132	0.009	
	0.8	0.165	0.541	0.114	0.375	0.077	0.251	0.052	0.169	0.012	
L	1.0	0.185	0.607	0.128	0.420	0.086	0.282	0.058	0.190	0.014	
S	2.0	0.265	0.870	0.183	0.600	0.124	0.406	0.084	0.276	0.024	1.20
	2.4	0.292	0.957	0.201	0.660	0.136	0.447	0.093	0.305	0.027	
	3.0	0.328	1.076	0.226	0.742	0.153	0.503	0.105	0.344	0.032	
C	4.0	0.382	1.252	0.263	0.862	0.179	0.587	0.123	0.404	0.04	1.25
	6.0	0.474	1.555	0.326	1.069	0.223	0.732	0.154	0.507	0.055	
X	8.0	0.554	1.817	0.380	1.246	0.261	0.858	0.182	0.598	0.07	1.30
	10.0	0.625	2.052	0.428	1.405	0.296	0.971	0.207	0.680	0.084	
	12.4	0.704	2.310	0.481	1.579	0.334	1.096	0.235	0.772	0.101	
Ku	15.0	0.782	2.567	0.534	1.752	0.372	1.221	0.264	0.865	0.118	1.35
	18.0	0.866	2.842	0.590	1.937	0.413	1.356	0.294	0.965	0.139	
K	20.0	0.919	3.016	0.626	2.053	0.439	1.441			0.152	1.40
	22.0	0.970	3.183	0.660	2.165	0.464	1.523			0.165	
	24.0	1.019	3.345	0.693	2.272	0.489	1.603			0.178	
	26.5	1.079	3.540	0.732	2.402	0.518	1.699			0.194	
Ka	28.0	1.113	3.653	0.755	2.478	0.535	1.755			0.204	1.45
	30.0	1.159	3.801	0.785	2.576					0.217	
	32.0	1.203	3.946	0.814	2.672					0.23	
	34.0	1.246	4.087	0.843	2.766					0.243	
	36.0	1.288	4.225	0.871	2.857					0.256	
V	40.0	1.370	4.494	0.925	3.035					0.281	1.50
	45.0	1.468	4.816							0.313	
	50.0	1.563	5.127							0.344	