

NEXTPHASE™ MEGAPHASE NEXTPHASE™ STRANDED CONDUCTOR



MegaPhase 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	Impedance	Propagation Velocity	Time Delay
912S: 50.0 GHz 916S: 40.0 GHz 919S: 28.0 GHz 930S: 18.0 GHz	50 Ω nominal	912S, 916S: 74.0% nominal 919S: 75.0% nominal 930S: 77.0% nominal	912S, 919S, 930S: 1.35 ns/ft (4.43 ns/m) 916S: 1.33 ns/ft (4.36 ns/m)
Shielding Effectiveness	Dielectric Withstanding Voltage	Capacitance	
-90 dB minimum (cable only)	5.0 kV at 60 Hz	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

Finished Outer Diameter	Static Bend Radius	Weight	Operating Temp. Range
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)	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)	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)	-85 to 392°F (-65 to 200°C)

Cable Construction

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

Available Connectors

912S, 916S: SMA, 2.4 mm, 2.92 mm, 3.5 mm,
919S, 930S: SMA, TNC, Type N
Other connectors available upon request



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Specifications

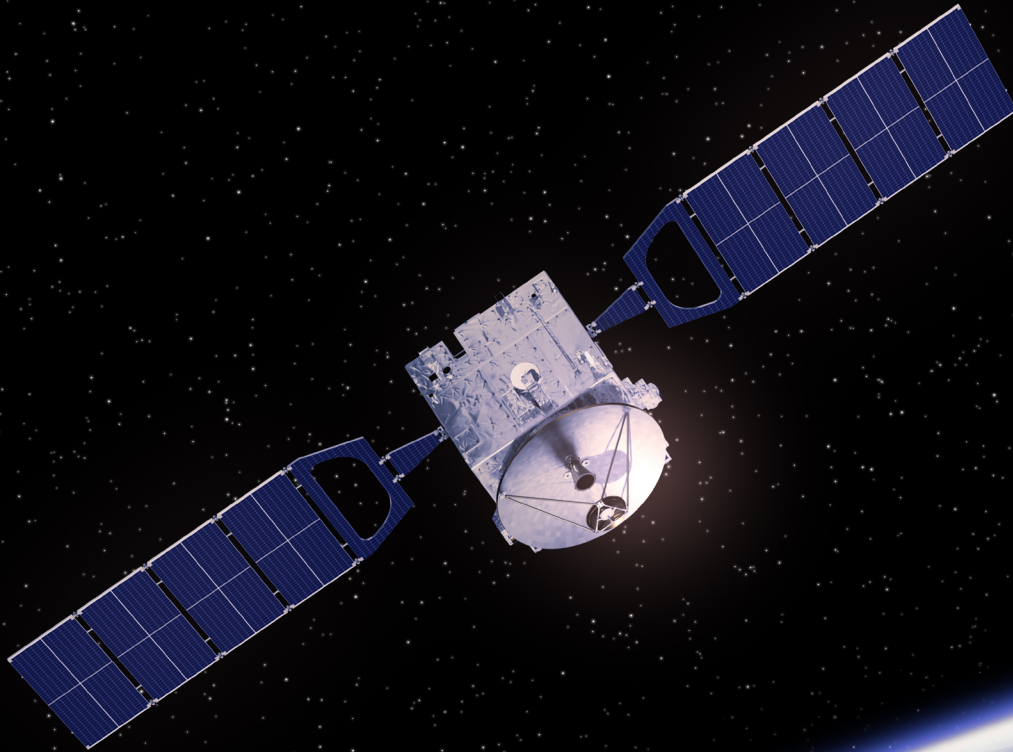
Frequency		912S Series		916S Series		919S Series		930S Series		Conn. Loss dB	VSWR
		Attenuation		Attenuation		Attenuation		Attenuation			
GHz	Band	dB/ft	dB/m	dB/ft	dB/m	dB/ft	dB/m	dB/ft	dB/m		
UHF	0.3	0.100	0.328	0.069	0.227	0.046	0.152	0.031	0.101	0.006	1.10
	0.5	0.130	0.425	0.090	0.295	0.060	0.197	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	0.040	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	0.070	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	-	-	-	-	0.230	
	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	





MegaPhase®

With the right connection anything is possible



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About us

Founded in 1998 and headquartered in Stroudsburg, Pennsylvania, MegaPhase designs and manufactures high-performance RF coaxial cables and connectors for OEMs in critical markets including test instrumentation, defense, aerospace, telecommunications, and satellite systems. Serving more than 500 customers in 30 countries—including major technology leaders and the U.S. government—MegaPhase is best known for its industry-leading GrooveTube® technology, a breakthrough flexible cable design used in high-reliability, high-power, and phase-defined applications across ground, sea, air, and space platforms. All products are manufactured in-house, tested 100% in a state-of-the-art RF lab up to 110 GHz, and engineered to deliver exceptional phase stability, low loss, and long-term measurement repeatability, helping customers achieve more reliable results at a lower cost per measurement.

MegaPhase

122 Banner Road, Stroudsburg, PA 18360-6433 | Tel: 570-424-8400 | Solutions@MegaPhase.com