

Coaxial Cable

Products Guide



The Difference Starts With The Cable

BULK CABLES



SLA Series

Lowest loss cable available to 18 GHz, best choice for critical applications where phase stability versus flexure and temperature matter most.



SM Series

Flexible alternative to semi-rigid cable. Uses semi-rigid connector for .086 and .141 cable sizes.



HP Series

Best all around choice for microwave test and interconnect cables. Toughest mechanical construction plus low loss and VSWR up to 55 GHz.



SI Series

Triple shielded RG equivalent cable for >90db shielding. Durable, low loss up to 18 GHz.



SW Series

Good electrical performance, low loss to 129 GHz. Simplified connector attachments and assembly methods.



DB Series

Low loss RG compatible. Easier connector termination than the SI series while maintaining improved performance over RG cable.



KW Series

High power, low loss, high flexibility compared to air dielectric corrugated cables.



RGE Series

Single and double shielded cables manufactured to meet or exceed MIL-C/17 requirements.



RG+ Series

60% lighter than standard RG cable. Better assembly yields with twice the VSWR performance of standard RG cables using crimp-on connectors.



BPE Series

Economical solution for 50 ohm coax assemblies to 6 GHz. Available in a range of sizes from 0.100" to 0.600". Ideal for antenna feeds over short distances.

HP Microwave Cable Assemblies

HP SERIES



Made HP Cable The Industry Standard

- Our hottest seller - the industry's favorite durable cable for communication, test and mil/aero applications worldwide
- Ideal characteristics for applications with tight electrical specs or exposure to extreme environmental conditions
- Shielding effectiveness >90 dB
- Better radial torque resistance and connector pull-off strength than helically wrapped braid designs

SPECIFICATIONS

	HP120s	HP160s	HP190s	HP305s	HP450
Inside Min. Bend Radius	.6"	.9"	1.1"	1.8"	2.5"
Operating Temperature	-65/200(∞C)	-65/200 (∞C)	-65/200 (∞C)	-65/200 (∞C)	-65/200 (∞C)
Weight (lbs/ft)	.02	.04	.05	.09	.20
Impedance (ohms)	50	50	50	50	50
Capacitance (pf/ft)	26.7	26.9	26.7	26.2	26
Inductance (nH/ft)	67	66	66	66	62
Shielding Effectiveness	>90(dB)	>90(dB)	>90(dB)	>90(dB)	>90(dB)
Cut Off Frequency	55 GHz	40 GHz	28 GHz	18 GHz	12 GHz
Velocity of Propagation	75.5%	76%	76.5%	77%	78%
Breakdown Voltage (KV)	>5	>7	>10	>15	>20
Max Structural VSWR	1.15:1	1.15:1	1.15:1	1.15:1	1.15:1

Other Microwave Cable Assemblies



SLA Series

- Lowest attenuation transmission line solution available
- Specifically matched to the maximum frequency ranges of popular connector series: N type, SMA, 2.92mm and 1.85mm. Other connector styles available
- Cable construction was developed to offer both low attenuation and excellent phase stability
- Suitable for instrument-grade applications such as PNA/VNA



SM Series

- Replacement for semi-rigid cables
- Eliminates need for 3-dimensional semi-rigid drawings
- Faster time to market
- Ideal for DC to 18 GHz applications where compact or densely spaced RF interconnects are needed



BPE Series

- Economical solution for 50 ohm coax assemblies to 6 GHz
- Available in a range of sizes from 0.100" to 0.600"
- Ideal for antenna feeds over short distances



RG+ Series

- Superior to standard RG for transmission line characteristics
- Strong signal performance over long install runs
- 60% lighter than standard RG
- Significantly improved temperature stability characteristics
- Highly flexible – ideal for tight spaces

CUSTOM CABLE ASSEMBLIES



Splitters and Power Dividers

- 3 and 4-way splitting on most coax cables
- Complete selection of connectors available

SEMI-RIGID AND CONFORMABLE



- Sizes from 0.047", 0.086", 0.141" and 0.250"
- 100% RF and microwave shielding
- Optional dielectric and jacket material available
- Automated bending and refined processes increase product quality and reduce cost

Other Microwave Products



Armored Cable Assemblies

- The ultimate in ruggedization
- Provides over 300 pounds per linear inch of protection
- Two armor attachment designs offering direct weld attachment to connector or rotary joint attachment
- Will accommodate all HP and SLA cable size diameters up to 0.305



Phase Trimmers

- Continuous, smooth, field adjustable to 26.5 GHz
- Extremely low VSWR and insertion loss
- Available in a slide (trombone) style or rotational adjustment
- Available in connector to connector or connector to semi-rigid attachment



Delay Lines

- In house design capability for standard and custom configurations
- Low loss dielectrics providing excellent phase stability
- Delay lines manufactured in semi-rigid or flexible cables, wound in coils or built to specific package shapes
- Standard delays from 5 to 200 ns.



Electroform Semi-Rigid Assemblies

- Electroplating technology (Electroform) used to produce geometric shapes not possible with standard rigid or flex cables.
- Superior insertion loss and low VSWR with tight bend angles
- Extremely good phase stability over temperature comes from the air dielectric construction
- Available with solderless connector attachment for high power applications



Custom Components

- Low profile right angle connectors to 18.0 GHz
- High power and custom interfaces
- Precision high performance coaxial adapters to 55.0 GHz
- Economical coaxial adapters



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About Emerson Network Power Connectivity Solutions

Emerson Network Power Connectivity Solutions, an Emerson business, serves the needs of wireless communications, telephony and data networks, CATV, security systems, health care and industrial facilities with a full spectrum of broadband copper and fiber optic connectivity products. For more information, visit www.EmersonNetworkPower.com/Connectivity.

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