

KL-1500B — High-Power Low-Loss Coaxial Cable
High-Power, Low-Loss Coaxial Cable



Structure & Materials

Element	Dimension (mm)	Material
Center Conductor	4.40	Silver-Plated Copper
Dielectric	12.50	Low-Density PTFE
Inner Shield	12.74	Silver-Plated Copper Tape
Middle Layer	12.85	High-Temperature Aluminum Foil
Outer Shield	13.60	Silver-Plated Copper Braid
Outer Jacket	14.70	Blue FEP (Custom Colors Available)

Electrical Properties

Parameter	Value
Operating Frequency	DC – 6 GHz
Cutoff Frequency	8 GHz
Characteristic Impedance	50 Ω
Velocity of Propagation	76%
Shielding Effectiveness	> 90 dB
Dielectric Withstanding Voltage	4000 V DC

Attenuation & Power Handling (Typical, 25°C / 40°C)

Frequency (MHz)	100	300	500	800	1000	2000	3000	5000	6000
Attenuation (dB/100m)	3.1	5.4	7.1	9.1	10.2	14.8	18.4	24.5	27.1
Avg. Power (kW)	14.724	8.384	6.433	5.031	4.472	3.088	2.477	1.866	1.684

Mechanical & Environmental

Static Bend Radius	Dynamic Bend Radius	Weight	Operating Temperature
74 mm	147 mm	0.432 kg/m	–55°C ~ +200°C

Features & Benefits

- Low insertion loss
- High power handling
- Low PIM (–155 dBc)
- High cost-performance
- High tensile strength

Typical Applications

- Airborne electronics
- Electronic warfare (EW)
- High-power RF transmission
- Wireless base station internal interconnect
- RF / microwave device testing