

RG174 Coaxial Cable

P/N: AT1RG174-1S



RG174 is a flexible, **50-ohm** miniature coaxial cable designed for signal transmission in space-constrained environments. It features a stranded bare copper-clad steel inner conductor and a high-density tinned copper braid, providing good shielding and mechanical strength for its size. Encased in a durable **PVC jacket** with a solid polyethylene dielectric, it remains highly maneuverable and easy to route. This compact profile makes RG174 the go-to solution for **GPS antennas**, automotive telematics, pigtail assemblies, and internal wiring of RF equipment where high flexibility is more critical than low attenuation.

Construction Specifications

Description	Material & Plating	Diameter (mm)
Centre Conductor	silver plated copper clad steel	7/0.15
Dielectric	PTFE	1.50
Outer Conductor	Tinned plated copper Braid	16*4/0.08(87%)
Jacket	PVC	2.80

Electrical Specifications

Parameter	Value	Unit
Frequency Range	DC-3	GHz
Impedance	50±2	Ω
Propagation Velocity	66	%
Capacitance	100	pF/m
Screening Effectiveness	40	dB
Insulation Resistance	1000	MΩ-Km
Inner Conductor Resistance	300	Ω/km
Outer Conductor Resistance	38	Ω/km
Operating Voltage (at sea level)	≤ 1.5	kVrms
Peak Power Rating	1.0	KW



Technical Data Sheet

Mechanical Specifications

Parameter	Value	Unit
Weight	40	Kg/km
Single Bending Radius	≥ 15	mm
Repeated Bending Radius	≥ 25	mm

Environmental Specifications

Parameter	Value	Unit
Operation Temperature	-40 ~ 80	°C
Installation Temperature	-15 ~ 55	°C

Attenuation

Frequency (GHz)	dB/100m
0.1	10.0
0.4	25.0
1.0	45.0
3.0	78.0