

RG59 Coaxial Cable

P/N: AT1RG59-1S



RG59 is a classic, **75-ohm** coaxial cable specifically designed for low-power video and RF signal connections. It features a **solid copper-clad steel** inner conductor and a high-density copper braid, which provides a balance between mechanical strength and electrical shielding. Encased in a durable **PVC jacket**, it is widely used for **CCTV systems, analog video runs, and laboratory equipment** where high flexibility and precise 75-ohm impedance are required over moderate distances. While it has higher attenuation than RG6 at high frequencies, its smaller diameter and greater flexibility make it the preferred choice for legacy video installations and short-patch applications.

Construction Specifications

Description	Material & Plating	Diameter (mm)
Centre Conductor	Copper clad Steel	0.8
Dielectric	Solid PE	3.50
1 st Outer Conductor	Al Tape	
2 nd Outer Conductor	Alloy Copper Braid	(90%)
Jacket	PVC	5.90

Electrical Specifications

Parameter	Value	Unit
Frequency Range	DC-1	GHz
Impedance	75±3	Ω
Propagation Velocity	66	%
Capacitance	55	pF/m
Screening Effectiveness	40	dB
Insulation Resistance	5000	MΩ-Km
Inner Conductor Resistance	155	Ω/km
Outer Conductor Resistance	15	Ω/km
Operating Voltage (at sea level)	≤ 2.0	kVrms
Peak Power Rating	3.5	KW



Technical Data Sheet

Mechanical Specifications

Parameter	Value	Unit
Weight	50	Kg/km
Single Bending Radius	≥ 30	mm
Repeated Bending Radius	≥ 60	mm

Environmental Specifications

Parameter	Value	Unit
Operation Temperature	-25 ~ 70	°C
Installation Temperature	-5 ~ 50	°C

Attenuation

Frequency (GHz)	dB/100m
0.05	7.2
0.2	17.0
0.4	25.0
0.7	36.2
1.0	43.0