

### RG179 Coaxial Cable

P/N: AT1RG179-1B



RG179 is a high-performance, **75-ohm** miniature coaxial cable specifically engineered for high-definition video and precision signal transmission in tight spaces. It features a stranded silver-plated copper-clad steel inner conductor and a silver-plated copper braid, ensuring exceptional signal integrity and low attenuation for its compact size. Its high-grade **PTFE** dielectric and durable **FEP** jacket provide superior resistance to chemicals, moisture, and extreme temperatures ranging from **-55°C to +200°C**. Highly flexible and lightweight, RG179 is the preferred choice for medical imaging equipment, broadcast video systems, digital audio interfaces, and aerospace applications where reliable 75-ohm impedance and thermal stability are critical.

#### Construction Specifications

Description	Material & Plating	Diameter (mm)
Centre Conductor	silver plated copper clad steel	7/0.102
Dielectric	PTFE	1.6
Outer Conductor	Silver plated copper Braid	16*5/0.1 (94%)
Jacket	FEP	2.54

#### Electrical Specifications

Parameter	Value	Unit
Frequency Range	DC-1	GHz
Impedance	75±3	Ω
Propagation Velocity	69	%
Capacitance	64	pF/m
Screening Effectiveness	40	dB
Insulation Resistance	5000	MΩ-Km
Inner Conductor Resistance	800	Ω/km
Outer Conductor Resistance	45	Ω/km
Operating Voltage (at sea level)	≤ 1.2	kVrms
Peak Power Rating	1.0	KW



## Technical Data Sheet

### Mechanical Specifications

Parameter	Value	Unit
Weight	40	Kg/km
Single Bending Radius	$\geq 10$	mm
Repeated Bending Radius	$\geq 20$	mm

### Environmental Specifications

Parameter	Value	Unit
Operation Temperature	-55 ~ 200	°C
Installation Temperature	-20 ~ 60	°C

### Attenuation

Frequency (GHz)	dB/100m
0.05	10.2
0.1	24.0
0.4	54.9
1.0	86.9