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Technical Data Sheet

RG316 Coaxial Cable

P/N: AT1RG316-1B

RG316 is a high-performance, 50-ohm miniature coaxial cable engineered for demanding RF and microwave applications. Featuring a stranded silver-plated copper-clad steel conductor, PTFE dielectric, and a silver-plated copper braid shield; it ensures excellent conductivity and superior shielding. Its durable FEP jacket provides outstanding resistance to chemicals, moisture, and extreme temperatures (-55°C to +200°C). Highly flexible and compact, RG316 is ideal for military communications, aerospace equipment, medical electronics, and high-frequency wireless infrastructure where space is limited.

Construction Specifications

Description	Material & Plating	Diameter (mm)
Centre Conductor	Silver-Plated Copper-Clad Steel	0.54
Dielectric	PTFE (Polytetrafluoroethylene)	1.56
Outer Conductor	Silver-Plated Copper Braid	2.0
Jacket	FEP (Fluorinated ethylene propylene)	2.54

Electrical Specifications

Parameter	Value	Unit
Frequency Range	DC-3	GHz
Impedance	50	Ω
Propagation Velocity	69	%
Capacitance	97	pF/m
Screening Effectiveness	30	dB
Insulation Resistance	1×10^5	MΩ-Km
Inner Conductor Resistance	235	Ω/km
Outer Conductor Resistance	31	Ω/km
Operating Voltage (at sea level)	≤ 1.2	kVrms
Peak Power Rating	40	KW

Ground floor, Plot No -20, (KH No-160/1,street No-3/2, samta Vihar, Mukandpur Extn., North West Delhi, Delhi-110042
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Mechanical Specifications		
Parameter	**Value**	**Unit**
Weight	0.18	Kg/m
Single Bending Radius	≥ 15	mm
Repeated Bending Radius	≥ 25	mm

Environmental Specifications		
Parameter	**Value**	**Unit**
Operation Temperature	-65 - 200	°C
Installation Temperature	-20 - 60	°C

Attenuation		
Frequency (GHz)	**dB/ft**	**dB/m**
0.05		25.1
0.1		42.5
0.4		76.2
1.0		124.5
2.0		150.7
3.0		205.8

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