Technical
Data Sheet

HLF 900 Coaxial Cable

P/N: AT1ATR900-1S

The **HLF900 cable** represents the pinnacle of the HLF series, offering the **lowest attenuation and highest power handling** available in a **flexible, 50-ohm low-loss coaxial** design. It features a massive, solid copper center conductor and a sophisticated double-shielding architecture—utilizing 100% coverage bonded aluminum foil and a dense tinned copper braid—to ensure **total EMI suppression**. Its large-profile, high-velocity foam dielectric makes it the ultimate choice for **extreme-distance antenna feeders, mission-critical RF infrastructure**, **High-Power Broadcast**, **Satellite Ground Stations**, Deep-**Pit Mining & Tunnels**, and **Radar & Defense Systems**. Where minimizing decibel loss is the absolute priority.

Construction Specifications

Description	Material & Plating	Diameter (mm)
Centre Conductor	Solid Copper Clad Aluminum Wire	6.65
Dielectric	Solid Polyethylene	17.27
1st Outer Conductor	Sealed APA Tape	17.42
2nd Outer Conductor	Tinned Copper Braid	18.59
Jacket	Black PE	22.10

Electrical Specifications

Parameter	Value	Unit
Frequency Range	DC - 10	GHz
Impedance	50	Ω
Propagation Velocity	87	%
Capacitance	76.2	pF/m
Screening Effectiveness	≥90	dB
Insulation Resistance	5000	MΩ-Km
Inner Conductor Resistance	1.77	Ω/km
Outer Conductor Resistance	1.90	Ω/km
Voltage Withstanding	5000	V DC
Peak Power Rating	62	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	400	Kg/km
Single Bending Radius	≥ 75	mm
Repeated Bending Radius	≥ 180	mm

Environmental Specifications		
Parameter	**Value**	**Unit**
Operation Temperature	-35 ~ 75	°C
Installation Temperature	-20 ~ 60	°C

Attenuation and Power Rating vs Frequency			
Frequency	**Attenuation (dB/100ft)**	**Attenuation (dB/100m)**	**Avg. Power Rating (kW)**
30 MHz	0.43	1.4	5.51
50 MHz	0.55	1.8	4.24
150 MHz	0.98	3.2	2.41
220 MHz	1.19	3.9	1.97
450 MHz	1.71	5.6	1.35
900 MHz	2.50	8.2	0.93
1500 MHz	3.32	10.9	0.70
1800 MHz	3.69	12.1	0.63
2000 MHz	3.90	12.8	0.59
2500 MHz	4.42	14.5	0.52
5800 MHz	7.25	23.8	0.32

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