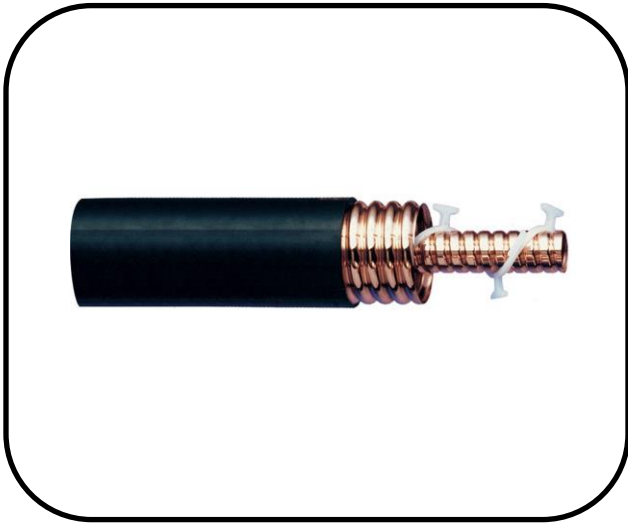


## AAT-HC318-AC: 3-1/8" 50 ohm Coaxial Cable



### Features

- Ultra Low Attenuation
- Copper Shield
- Low VSWR
- Wide Frequency Range
- Excellent Power Rating
- UV Resistant
- Air Dielectric

### Materials and Dimensions

<i>Inner Conductor-helical corrugated copper</i>	34.7 mm   1.366 in
<i>Dielectric Material</i>	Helical Polyethylene Spacer
<i>Outer conductor – Corrugated copper tube</i>	85.4 mm   3.362 in
<i>Diameter over outer jacket – Polyethylene, Black</i>	91.0 mm   3.582 in

### Mechanical Specifications

<i>Cable Weight</i>	3.538 kg/m   2.377 lb/ft
<i>Tensile Strength</i>	1800 N   405 lb
<i>Min. Bending Radius (single)</i>	380 mm   14.960 in
<i>Min. Bending Radius (repeated)</i>	1100 mm   43.307 in
<i>Number of bends, minimum</i>	15
<i>Recommended Hanger Spacing</i>	0.914 m   3 ft

### Environmental Specifications

<i>Installation Temperature</i>	-40°C to +60°C
<i>Operating Temperature</i>	-45°C to +85°C
<i>Storage Temperature</i>	-70°C to +85°C
<i>2002/95/EC (RoHS)</i>	compliant

### VSWR

<i>Voltage Stand Wave Ratio</i>	≤ 1.03:1 @ 500 kHz to 240 MHz ≤ 1.07:1 @ 241 to 570 MHz ≤ 1.08:1 @ 571 to 1000 MHz
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## Electrical Specifications

<b>Impedance</b>	<b>50 ± 0.5 Ω</b>
<b>Relative Velocity of Propagation</b>	<b>96%</b>
<b>Capacitance (1 kHz)</b>	<b>70 pF/m</b>
<b>Maximum Operating Frequency</b>	<b>1.67 GHz</b>
<b>Peak Power Rating</b>	<b>940 kW</b>
<b>RF Peak Voltage</b>	<b>9710 V</b>
<b>Inner Conductor DC Resistance</b>	<b>0.428 Ω / m</b>
<b>Outer Conductor DC Resistance</b>	<b>0.12 Ω / m</b>
<b>DC Breakdown Voltage</b>	<b>15000 V</b>
<b>Jacket Spark Test Voltage</b>	<b>8000 Vrms</b>

## Attenuation

<b>Frequency (MHz)</b>	<b>Attenuation (dB/100m)</b>	<b>Average Power (kW)</b>
0.5	0.03	794
1	0.04	562
2	0.05	396
20	0.15	124
30	0.18	102
80	0.33	58.3
100	0.36	54.5
150	0.45	44.1
450	0.80	25.2
824	1.14	18.7
900	1.18	18.0
1000	1.25	17.1

## Ordering Information

<b>Part Number</b>	<b>Description</b>	<b>UOM</b>
<b>AAT-HC318-AC</b>	3-1/8" 50 ohm Air Coaxial Cable	Per Ft.

*Disclaimer: Specifications are subject to change without notice. Information may be changed or updated without notice. American Amplifier Technologies™ may also make improvements and/or changes in the products and/or pricing described at any time without notice.*