

SDY-50-80 Air Dielectric Coaxial Cable (3-1/8")

3-1/8 inch extra-large air dielectric cable for broadcast and ultra-high-power applications.

IMPEDANCE	OUTER DIAMETER
50 ± 2 Ω	**91 mm**
MAX. FREQUENCY	
1.66 GHz	

3-1/8" | 50Ω | 50Ω Air Dielectric Corrugated Copper Tube Coaxial Cable

Custom lengths, connectors and pre-assembled jumpers are available. Send us your specification for a quotation.

TECHNICAL DATA

Technical parameters

Source: 2026 Technical Selection Manual

STRUCTURE

Inner conductor	smooth / helical corrugated copper tube helical corrugated 34.7 mm insulation (PE tape) helical PE tape support 75.2 mm
Outer conductor	helical corrugated copper tube helical corrugated 85.4 mm
Jacket	PE / FR PE 91.0 mm

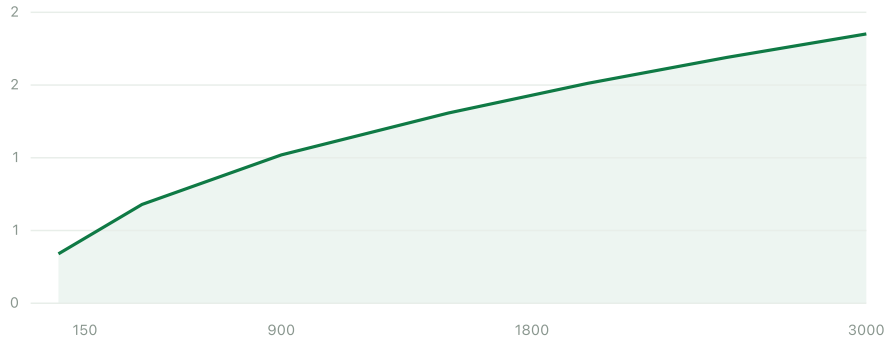
ELECTRICAL

Characteristic impedance	50 ± 2 Ω
Nominal capacitance	70 ~ 72 pF/m
Velocity of propagation	0.96 c average power @900 MHz 13.40 kW
Peak power	940 kW cutoff frequency 1.66 GHz
DC breakdown voltage	1.9 ~ 9.7 kV (per size)

MECHANICAL & ENVIRONMENT

Applications	broadcast transmitter main feeder, radar, satellite earth station (3- 1/8′′ and and above pressurization required for moisture protection)

ATTENUATION & POWER



Attenuation in dB/100 m at 20 °C, nominal values (±5%).

MHz	dB/100m	MHz	dB/100m
100	0.4	2000	1.78
400	0.8	2500	1.99
900	1.2	3000	2.18
1500	1.54		

Product description

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