

7/8" Standard Corrugated Aluminum Tube Coaxial Cable

7/8 inch aluminum tube outer conductor, balancing performance and cost.

IMPEDANCE	OUTER DIAMETER
50 ± 1 Ω	**27.5 mm**
MAX. FREQUENCY	
5.0 GHz	

7/8" Standard | 50Ω | 50Ω RF Corrugated Aluminum 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 copper tube 9.0 mm
Dielectric	foam PE 22.4 mm
Outer conductor	annular corrugated copper tube 24.9 mm
Jacket	PE or LSZH/FRNC 27.5 mm

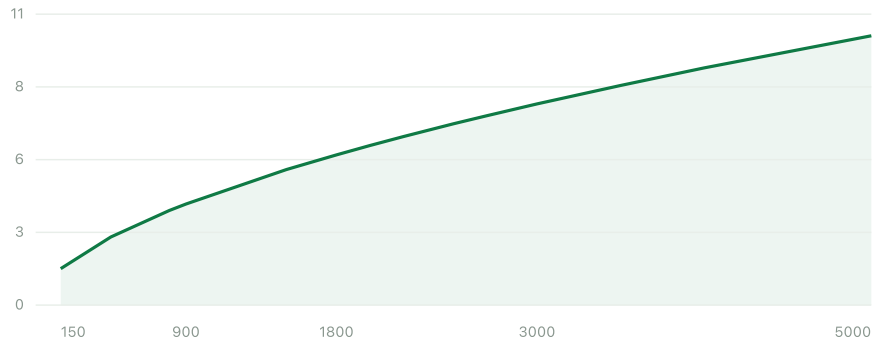
ELECTRICAL

Characteristic impedance	50 ± 1 Ω
Velocity of propagation	87 % (foam PE)
Nominal capacitance	76 pF/m
Peak power	91 kW
Max. frequency	5.0 GHz
VSWR	≤ 1.10 (≤ 3 GHz); ≤ 1.15 (3– 4 GHz); ≤ 1.20 (4–6 GHz)
Insulation resistance	≥ 5000 MΩ·km
DC breakdown voltage	≥ 2 kV (small size) ~ 16 kV (large size)
PIM	PIM (3rd-order, 2 × 20W) ≤ –160 dBc

MECHANICAL & ENVIRONMENT

Min. bending radius (single/multi)	140 / 250 mm
Tensile strength	1500 N
Weight	≈ 540 kg/km
Jacket material	PE / LSZH/FRNC
Installation temperature	≥ –20 °C (preheat required for low-temperature installation)
Operating temperature	PE –40 ~ +85 °C; FRNC –25 ~ +70 °C
Standards	IEC 61196-1, YD/T 1092, GB/T 14864
Applications	macro-site main feeder, long-distance feed; for use with DIN 7/16 or 4.3-10 connectors

ATTENUATION & POWER



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

MHz	dB/100m	MHz	dB/100m
150	1.39	2200	6.43
450	2.6	2500	6.92
800	3.61	2700	7.23
900	3.86	3000	7.68
1500	5.17	3500	8.38
1800	5.73	4000	9.05
2000	6.09	5000	10.28

Product description

The 7/8-inch Standard Corrugated Aluminum Tube 50 Ohm Coaxial Cable is a resilient and versatile option for RF signal distribution, offering a combination of durability and performance. With its standard flexibility, it is well-adapted for installations that require moderate maneuverability while maintaining structural integrity. The aluminum tube serves as an efficient shield against electromagne