

1/2" Standard Corrugated Aluminum Tube Coaxial Cable

Aluminum tube outer conductor design, lightweight and cost-effective, suitable for medium-short distance transmission.

IMPEDANCE	OUTER DIAMETER
50 ± 1 Ω	**15.9 mm**
MAX. FREQUENCY	
8.8 GHz	

1/2" 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	CCA 4.8 mm
Dielectric	foam PE 12.2 mm
Outer conductor	annular corrugated copper tube 13.8 mm
Jacket	PE or LSZH/FRNC 15.9 mm

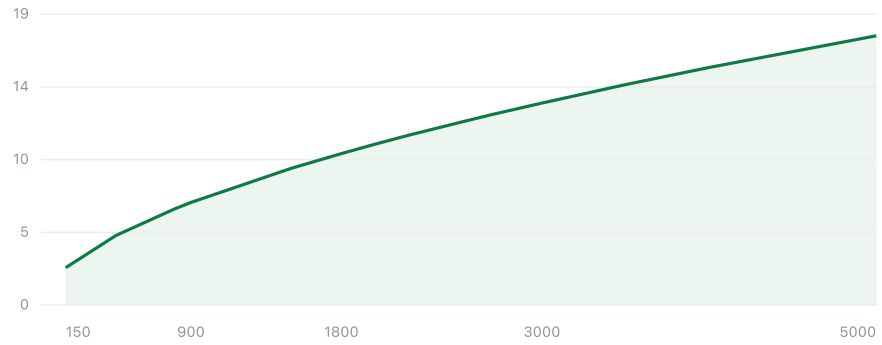
ELECTRICAL

Characteristic impedance	50 ± 1 Ω
Velocity of propagation	87 % (foam PE)
Nominal capacitance	76 pF/m
Peak power	40 kW
Max. frequency	8.8 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)	80 / 125 mm
Tensile strength	1130 N
Weight	≈ 250 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, indoor distribution trunk; 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	2.49	2200	11.28
450	4.62	2500	12.12
800	6.38	2700	12.66
900	6.82	3000	13.43
1500	9.09	3500	14.65
1800	10.07	4000	15.79
2000	10.69	5000	17.9

Product description

Introducing the 1/2-inch Standard Corrugated Aluminum Tube 50 Ohm Coaxial Cable, a dependable option for RF signal transmission that offers a balance of performance and affordability. This cable features a standard level of flexibility, suitable for a variety of installation types where moderate movement is expected. The aluminum tube construction provides effective shielding against electromagnet