

1/4" Annular Corrugated Copper Tube Coaxial Cable

Annular corrugated structure, low loss transmission, suitable for wireless communication systems.

IMPEDANCE	OUTER DIAMETER
50 ± 1 Ω	**9.8 mm**
MAX. FREQUENCY	
15.8 GHz	

1/4" Annular | 50Ω | 50Ω RF 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	CCA 2.6 mm
Dielectric	foam PE 6.8 mm
Outer conductor	annular corrugated copper tube 7.7 mm
Jacket	PE or LSZH/FRNC 9.8 mm

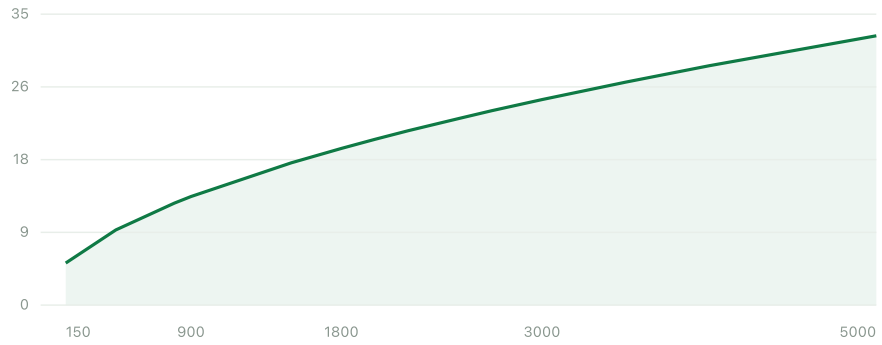
ELECTRICAL

Characteristic impedance	50 ± 1 Ω
Velocity of propagation	87 % (foam PE)
Nominal capacitance	76 pF/m
Peak power	12.1 kW
Max. frequency	15.8 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)	40 / 80 mm
Tensile strength	910 N
Weight	≈ 130 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	indoor distribution terminal, short jumper, micro base station; 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	5.07	2200	21.04
450	9.07	2500	22.51
800	12.31	2700	23.45
900	13.1	3000	24.79
1500	17.17	3500	26.9
1800	18.91	4000	28.88
2000	20	5000	32.5

Product description

The 1/4-inch Standard Corrugated Copper Tube 50 Ohm Coaxial Cable is a reliable choice for RF transmission, offering a balance of performance and durability. Its copper tube serves as a resilient shield, effectively mitigating electromagnetic interference for clear signal delivery. The cable's standard flexibility is well-suited for a variety of installations, from fixed to semi-mobile environment