

1/4" Super Flexible Spiral Corrugated Copper Tube Coaxial Cable

Suitable for mobile communication base station antenna systems, with excellent flexibility and signal transmission performance.

IMPEDANCE	OUTER DIAMETER
50 ± 1 Ω	**7.4 mm**
MAX. FREQUENCY	
20.4 GHz	

1/4" Super Flexible | 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 1.9 mm
Dielectric	foam PE 4.8 mm
Outer conductor	helical corrugated copper tube 6.4 mm
Jacket	PE or LSZH/FRNC 7.4 mm

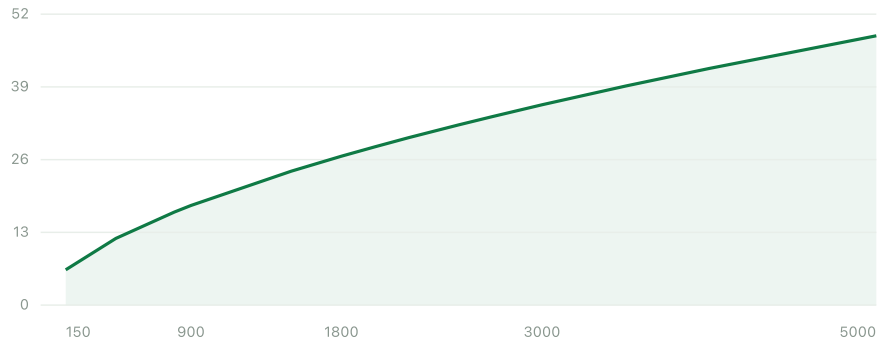
ELECTRICAL

Characteristic impedance	50 ± 1 Ω
Velocity of propagation	87 % (foam PE)
Nominal capacitance	76 pF/m
Peak power	6.4 kW
Max. frequency	20.4 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)	12 / 25 mm
Tensile strength	680 N
Weight	≈ 120 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	6.28	2200	29.82
450	11.88	2500	32.12
800	16.59	2700	33.58
900	17.76	3000	35.7
1500	23.88	3500	39.04
1800	26.55	4000	42.18
2000	28.22	5000	48.01

Product description

The 1/4-inch Super-Flexible Corrugated Copper Tube 50 Ohm Coaxial Cable is engineered for applications demanding exceptional flexibility and durability. With its robust copper tube as an outer conductor, it provides shielding against electromagnetic interference, ensuring pristine signal integrity. The cable's corrugated design enhances its flexibility, allowing it to navigate tight bends without