

1/2" Super Flexible Spiral Corrugated Copper Tube Coaxial Cable

1/2 inch super flexible coaxial cable, widely used in base station feeder systems.

IMPEDANCE	OUTER DIAMETER
50 ± 1 Ω	**13.55 mm**
MAX. FREQUENCY	
10.2 GHz	

1/2" 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 3.6 mm
Dielectric	foam PE 9.1 mm
Outer conductor	helical corrugated copper tube 12.0 mm
Jacket	PE or LSZH/FRNC 13.55 mm

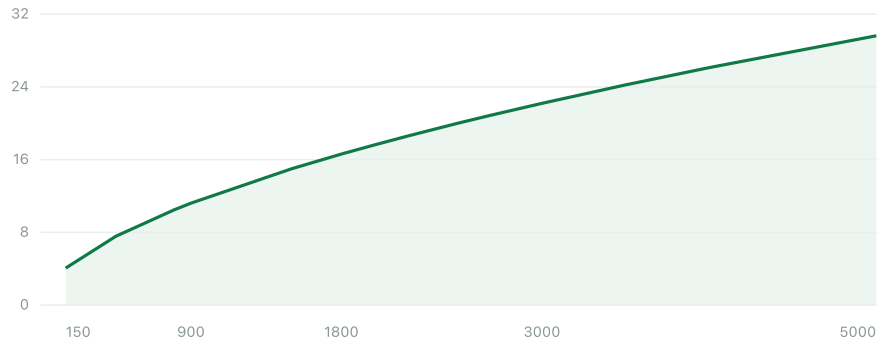
ELECTRICAL

Characteristic impedance	50 ± 1 Ω
Velocity of propagation	87 % (foam PE)
Nominal capacitance	76 pF/m
Peak power	16.0 kW
Max. frequency	10.2 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)	17 / 35 mm
Tensile strength	800 N
Weight	≈ 205 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	4.02	2200	18.4
450	7.49	2500	19.78
800	10.37	2700	20.66
900	11.09	3000	21.93
1500	14.81	3500	23.93
1800	16.42	4000	25.81
2000	17.43	5000	29.28

Product description

The 1/2-inch Super-Flexible Corrugated Copper Tube 50 Ohm Coaxial Cable is crafted for applications that require a high degree of maneuverability without sacrificing signal strength. Its corrugated copper tube design not only offers robust electromagnetic interference (EMI) shielding but also allows the cable to flex repeatedly without performance degradation. Ideal for use in high-vibration envir