

1-5/8" Annular Corrugated Copper Tube Coaxial Cable

Ultra-low loss backbone transmission line, meeting long-distance high-power transmission needs.

IMPEDANCE	OUTER DIAMETER
50 ± 1 Ω	**22.2 mm**
MAX. FREQUENCY	
6.1 GHz	

1-5/8" 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	smooth copper tube 7.0 mm
Dielectric	foam PE 17.0 mm
Outer conductor	annular corrugated copper tube 19.7 mm
Jacket	PE or LSZH/FRNC 22.2 mm

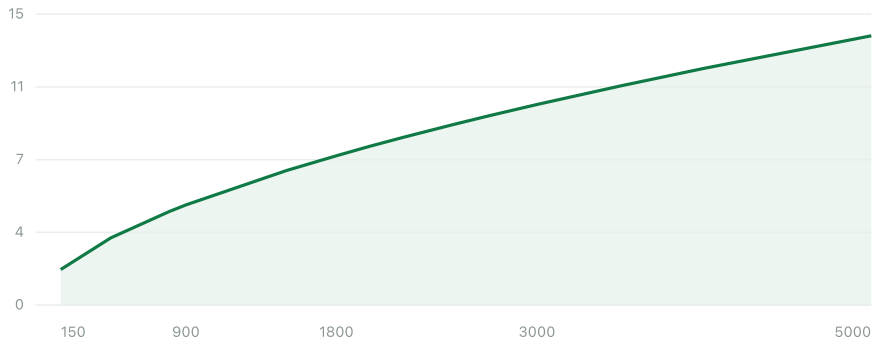
ELECTRICAL

Characteristic impedance	50 ± 1 Ω
Velocity of propagation	87 % (foam PE)
Nominal capacitance	76 pF/m
Peak power	62 kW
Max. frequency	6.1 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)	100 / 200 mm
Tensile strength	1150 N
Weight	≈ 360 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	medium-power main feeder; 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	1.78	2200	8.39
450	3.36	2500	9.03
800	4.68	2700	9.44
900	5.01	3000	10.03
1500	6.73	3500	10.96
1800	7.47	4000	11.84
2000	7.94	5000	13.47

Product description

The 1 5/8-inch Standard Corrugated Copper Tube 50 Ohm Coaxial Cable is a robust choice for applications requiring substantial signal transmission with reliable shielding. This cable is designed with a standard flexibility that accommodates various installation scenarios, offering a balance between performance and ease of handling. The corrugated copper tube ensures EMI shielding, maintaining signa