

QR500 Aluminum Tube Cable

QR500 standard aluminum tube cable, widely used for CATV trunk transmission.

IMPEDANCE	OUTER DIAMETER
75 ± 2 Ω	**14.2 mm**

QR500 | 75Ω | 75Ω QR Series 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 wire (CCA) 2.77 mm
Dielectric	foam PE 11.43 mm
Outer conductor	welded (longitudinal argon-arc) smooth aluminum tube 12.70 mm
Jacket	PE or LSZH LSZH 14.20 mm

ELECTRICAL

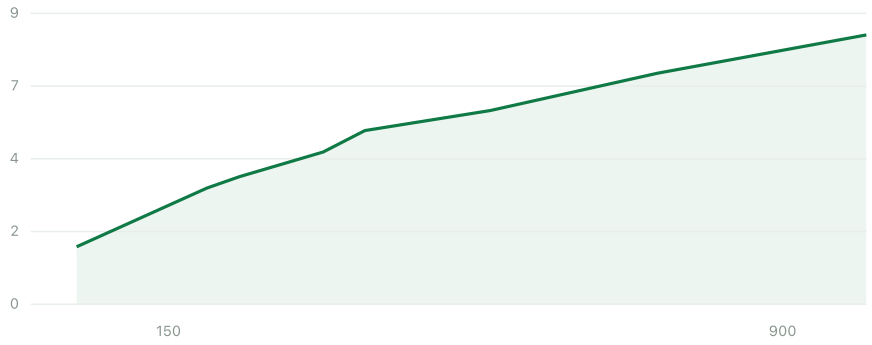
Characteristic impedance	75 ± 2 Ω

Nominal capacitance	50 ± 3 pF/m
Velocity of propagation	86 % return loss ≥ 24 dB (5–300 MHz); ≥ 22 dB (300–1000 MHz) shielding attenuation ≥ 100 dB (55 MHz); ≥ 110 dB (211–1000 MHz) inner conductor DC resistance ≤ 4.43 Ω/km (20 °C)
Insulation resistance	≥ 5000 MΩ·km jacket spark test ≥ 4000 V AC

MECHANICAL & ENVIRONMENT

Min. bending radius	≈ 142 mm (10 × cable OD) max. tensile force ≈ 136 kgf self-supporting strand optional (QR500M, for aerial installation)
Operating temperature	PE –40 ~ +85 °C; PVC –25 ~ +70 °C
Standards	GY/T 135, SJ/T 11138
Applications	CATV trunk line / distribution trunk, HFC long-distance bidirectional HFC transmission

ATTENUATION & POWER



Attenuation in dB/100 m at 20 °C, nominal values (±5%).

MHz	dB/100m	MHz	dB/100m
55	1.77	400	5.35
211	3.58	550	5.97
250	3.93	750	7.12
350	4.69	1000	8.3

Product description

Introducing the QR500 75-Ohm Aluminum Tube Cable, a next-generation solution for signal transmission that embodies the pinnacle of engineering excellence. This cable is designed for rigorous applications, offering a seamless blend of durability, flexibility, and performance.