

## BT 3002 Coaxial Cable

P/N: AT1BT3002-1S



BT3002 is a precision **75-ohm** coaxial cable specifically designed for high-speed digital telecommunications and data transmission. It features a **solid bare copper** center conductor and a **double tinned copper braid** shield, providing exceptional screening against crosstalk and electromagnetic interference—critical for dense exchanges and switching centers. Often used in 2Mbit/s, 34Mbit/s, and 155Mbit/s digital signal distribution, it is typically encased in a **Low Smoke Zero Halogen (LSZH)** jacket to comply with strict indoor fire safety standards. Its compact diameter and high shielding performance make it the standard for **G.703 E1/E3 interfaces, telecommunications DDF racks, and cellular base station backhaul.**

### Construction Specifications

Description	Material & Plating	Diameter (mm)
Centre Conductor	Bare Copper	0.31
Dielectric	PE	1.95
1 <sup>st</sup> Outer Conductor	Tinned Copper Braid	
2 <sup>nd</sup> Outer Conductor	Tinned Copper Braid	16*5/0.1(85%)
Jacket	PVC	3.55

### Electrical Specifications

Parameter	Value	Unit
Frequency Range	DC-3	GHz
Impedance	75±3	Ω
Propagation Velocity	66	%
Capacitance	67	pF/m
Screening Effectiveness	85	dB
Insulation Resistance	5000	MΩ-Km
Inner Conductor Resistance	75	Ω/km
Outer Conductor Resistance	12	Ω/km
Operating Voltage (at sea level)	≤ 1.5	kVrms
Peak Power Rating	1.5	KW



## Technical Data Sheet

### Mechanical Specifications

Parameter	Value	Unit
Weight	45	Kg/km
Single Bending Radius	≥ 25	mm
Repeated Bending Radius	≥ 50	mm

### Environmental Specifications

Parameter	Value	Unit
Operation Temperature	-20 ~ 60	°C
Installation Temperature	-5 ~ 50	°C

### Attenuation

Frequency (GHz)	dB/100m
0.07	16.8
0.2	32