



ETL Systems
New technologies
in RF distribution

AP18-xxx-510003-N4N4
AP18-xxx-510003-S4N4

Coaxial Test Cable

Low Loss, Super Flexible,
SMA Male Connectors

- Frequency DC-18GHz
- Connectors : SMA or N-type Male
- PUR Jacket
- Velocity of Propagation 81%
- Super Flexible
- ROHS Compliant

ETL's AP series of cable assemblies are designed for general purpose laboratory and equipment applications where high performance, flexibility and low loss are key features. Connectors are N-type Male or SMA Male, giving excellent RF performance up to 18GHz.

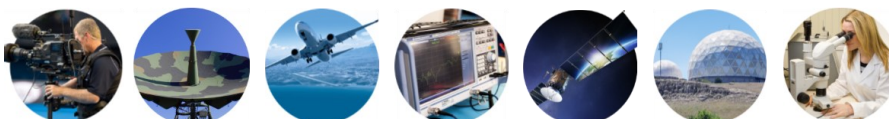
Standard lengths range from 0.5 to 5.0 metres in 0.5M increments but longer lengths up to 20M available on request.



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- 2
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- 5

1. Centre Conductor: Silver Plated Copper (dia. 1.02mm)
2. Dielectric: LD PTFE (dia. 3.07mm)
3. Outer Conductor: Silver Plated Copper Ribbon (dia. 3.27mm)
4. Outer shield: Silver Plated Copper (dia. 3.78mm)
5. Jacket: Blue PUR (dia. 5.0mm)

GENERAL SPECIFICATIONS	
Operating Frequency	DC-18GHz
Connectors	N-type Male Stainless Steel SMA Male Stainless Steel
Attenuation (Typical values @20°C)	@ 6 GHz 1.0dB/m @10 GHz 1.4dB/m
Cable Impedance	50 (+/-1) ohms
Velocity of Propagation	76%
Capacitance	85pF/m
Phase Stability vs Frequency	+/-3 degrees
Phase Stability vs Temperature	500ppm typical
Shielding Effectiveness	90dB
Voltage Withstand	1000V DC
Operating Temperature	-55 to +85°C
Cable Outside Diameter	5.0mm
Minimum Bend Radius	20mm
Weight	50g/m





PART NUMBER	LENGTH (METRES)	INSERTION LOSS (dB TYPICAL)			VSWR TYPICAL		
		6	12	18	6 GHz	12	18
N-type Male/N-type Male Connectors DC-		6	12	18	6 GHz	12	18
AP18-005-510003-N4N4	0.5	0.8	1.1	1.4	1.1	1.2	1.3
AP18-010-510003-N4N4	1.0	1.3	1.9	2.4	1.1	1.2	1.3
AP18-015-510003-N4N4	1.5	1.8	2.7	3.4	1.1	1.2	1.3
AP18-020-510003-N4N4	2.0	2.3	3.5	4.4	1.1	1.2	1.3
AP18-025-510003-N4N4	2.5	2.8	4.3	5.4	1.1	1.2	1.3
AP18-030-510003-N4N4	3.0	3.3	5.1	6.4	1.1	1.2	1.3
AP18-035-510003-N4N4	3.5	3.8	5.9	7.4	1.1	1.2	1.3
AP18-040-510003-N4N4	4.0	4.3	6.7	8.4	1.1	1.2	1.3
AP18-045-510003-N4N4	4.5	4.8	7.5	9.4	1.1	1.2	1.3
AP18-050-510003-N4N4	5.0	5.3	8.3	10.4	1.1	1.2	1.3

PART NUMBER	LENGTH (METRES)	INSERTION LOSS (dB TYPICAL)			VSWR TYPICAL		
		6	12	18	6 GHz	12	18
SMA Male/N-type Male Connectors DC-18		6	12	18	6 GHz	12	18
AP18-005-510003-S4N4	0.5	0.5	0.6	0.6	1.1	1.2	1.3
AP18-010-510003-S4N4	1.0	1.0	1.4	1.6	1.1	1.2	1.3
AP18-015-510003-S4N4	1.5	1.5	2.2	2.6	1.1	1.2	1.3
AP18-020-510003-S4N4	2.0	2.0	3.0	3.6	1.1	1.2	1.3
AP18-025-510003-S4N4	2.5	2.5	3.8	4.6	1.1	1.2	1.3
AP18-030-510003-S4N4	3.0	3.0	4.6	5.6	1.1	1.2	1.3
AP18-035-510003-S4N4	3.5	3.5	5.4	6.6	1.1	1.2	1.3
AP18-040-510003-S4N4	4.0	4.0	6.2	7.6	1.1	1.2	1.3
AP18-045-510003-S4N4	4.5	4.5	7.0	8.6	1.1	1.2	1.3
AP18-050-510003-S4N4	5.0	5.0	7.8	9.6	1.1	1.2	1.3

TOLERANCE ON CABLE	
LENGTH RANGE	(+/-mm)
0 - 0.5M	+10/-0
0.51 - 1.0M	+25/-0
1.1 - 5.0M	+50/-0
5.1 - 20.0M	+100/-0

FREQUENCY (GHz)	POWER HANDLING TYPICAL VALUES @40°C (WATTS)
6	60
12	40
18	32

Longer lengths up to 20M available on request.

