

STATEMENT OF TECHNICAL REQUIREMENTS FOR CO-AXIAL CABLE

1. **Functionality.** Used for transmitting the signals with the required safety features including resistance to mechanical damage and environmental condition.

2. **Types of Cables.**

- (a) Shielded Co-axial Cable;50 Ohm
- (b) Non-Shielded Co-axial Cable;50 Ohm & 75 Ohm

3. **Major Acceptance Requirements.**

<u>SNo</u>	<u>Acceptance Criterion</u>	<u>Acceptance Condition</u>
1.	Inner Conductor	Core in tinned or silvered copper bare copper
2.	Solid Dielectric Materials	Polyethylene
3.	Insulation Resistance at 20°C	5 GΩ/Km
4.	Operating Temperature	Less than 85 Deg C
5.	Smoke Toxicity on full cable	NF F 16101 & NF X 70-100-1 CO < 1,720 mg/m ³ ; CO ₂ < 90,000 mg/m ³ I.T.C (Conventional toxicity index)/ 800°C ≤ 100
6.	Quantity of Halogenated Gas	IEC 60754-1 ; < 5 mg/g
7.	Smoke Corrosivity	IEC 60754-2 ;Ph>4.3; Weighted conductivity value < 10 μS/mm
8.	Emission of non-dense smokes	IEC 61034-1 & 61034-2 Light transmittance < 60 %
9.	Bending Radius	6 D

4. **Qualification Criterion.** The qualification tests (or type tests) in accordance with standard IEC 60092-350 are to be carried out by the manufacturer before marketing a type of standardized cable in order to check that the operating characteristics are satisfactory and suitable for the intended use. These tests are not to be repeated, unless modifications have been introduced in the choice of materials or cable construction, so that the operating characteristics may be affected.

5. **Acceptance Tests.** Confirmation by means of measurements or tests on the product that the supply is in compliance. These tests are carried out on the entire supply. The results of the acceptance tests are recorded in a report issued with the supply.