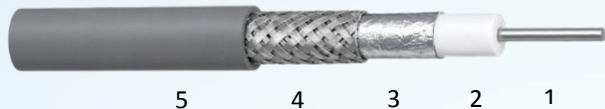


## Ultra Low Loss Phase Stable Cable

**Ultra Low Loss Phase Stable Coaxial Cable** is a high-performance, lightweight 50-ohm RF coaxial cable, an FEP jacket provide ultra-low signal loss and exceptional phase stability under severe mechanical and temperature changes. It is primarily applied in demanding microwave and defense environments, including military and phased-array radars, electronic warfare (EW), airborne platforms, and satellite communications.



**PART No: TE-RFC-ULLPS-D8.10**

| Cable Structure |                    |                           |          |
|-----------------|--------------------|---------------------------|----------|
| S No.           | Layer              | Material                  | Diameter |
| 1.              | Inner Conductor    | Silver Plated Copper      | 2.41 mm  |
| 2.              | Dielectric         | LD PTFE                   | 6.55 mm  |
| 3.              | Outer Conductor(1) | Silver Plated Copper Foil | 6.88 mm  |
| 4.              | Outer Conductor(2) | Silver Plated Copper      | 7.40 mm  |
| 5.              | Jacket             | FEP (Grey)                | 8.10 mm  |

| Physical Characteristics |                |                       |                 |
|--------------------------|----------------|-----------------------|-----------------|
| Weight (g/m)             | 145            | Working Temp.         | -55°C to +165°C |
| Min. Bending Radius      | 40mm (static)  | Storage Temp.         | -65°C to +90°C  |
| Min. Bending Radius      | 80mm (dynamic) | Tensile Strength (kg) | N/A             |

| Electrical Characteristics |         |                   |            |
|----------------------------|---------|-------------------|------------|
| Impedance                  | 50 ohms | Cut-Off Frequency | 18.5GHz    |
| Velocity                   | 84%     | Bending phase     | ±5°@18GHz  |
| Shielding Effectiveness    | > 90dB  | Temp. phase       | 600PPM     |
| V <sub>max</sub>           | 1500V   | Mech. phase       | ±0.1@18GHz |

| Frequency (GHz)     | 0.1  | 0.3  | 0.5  | 1    | 2.5  | 3    | 4    | 6    | 10   | 12.4 | 16   | 18   |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Attenuation dB/100m | 4.0  | 7.0  | 9.1  | 13.0 | 20.9 | 23   | 26.8 | 33.2 | 43.8 | 49.4 | 56.9 | 60.7 |
| Power Handling (kW) | 5.82 | 3.33 | 2.57 | 1.80 | 1.12 | 1.01 | 0.87 | 0.70 | 0.53 | 0.47 | 0.41 | 0.38 |

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