

# ADSS optical cable archive parameters



## Summary of Content

ADSS optical cables are designed for overhead power line applications, with key parameters including tensile strength, maximum allowable tension, fiber strain limits, and structural design to ensure reliable long-term performance.

### Mechanical Parameters

**Rated Tensile Strength (RTS/UTS):** Also called ultimate tensile strength or breaking strength, this is the calculated sum of the tensile strength of the cable's load-bearing components, typically aramid yarns or spun fibers. The actual breaking force must be at least 95% of the calculated value. RTS is critical for determining tower strength, hardware selection, and anti-vibration measures, with the maximum allowable tension (MAT) generally around 40% of RTS . **Maximum Allowable Tension (MAT/MOTS):** This is the tension the cable can safely withstand under design weather conditions without exceeding fiber strain limits. For stranded-layer designs, fiber strain should remain  $\leq 0.05\%$ , and for central-tube designs  $\leq 0.1\%$ , ensuring no additional optical attenuation occurs. MAT is used to calculate sag, span length, and fatigue resistance . **Ultimate Operating Tension (UES):** Also known as special-use tension, UES represents the maximum short-term overload the cable can tolerate during its service life. Fiber strain under UES should remain below 0.5% for central-tube and 0.35% for stranded designs. Temporary attenuation may occur, but fibers return to normal after tension release .

### Structural Parameters

## Article Content

### ADSS optical cable

Use an optical time domain reflectometer (OTDR) to conduct an opening test on the optical cable, check the attenuation

### Main Technical Parameters of ADSS Fiber Cable

Also known as special use tension, it refers to the maximum tension that the optical cable is subjected to when it is

### Technical Parameters of ADSS Fiber Optic Cables

Therefore, the main parameters of ADSS cables are in line with the regulations of power overhead lines.

### Ficha\_AR-1NSU-ADSS-PE-50M-xxF-G652D

This specification covers the design requirements and performance standard for the supply of optical fibre cable in the industry. It

### OPTICAL FIBER CABLE SPECIFICATION (ADSS-Span= 100m)

5. Optical Fiber Cable Characteristics 5.1 The Mechanical and Environmental Performance of the Cable ... 5.2 Installation Conditions

### Ficha\_AR-1-FADPE-ADSS-60M-xxF-G652D

The mechanical and environmental performance of the cable are in accordance with the following table. Unless otherwise specified,

### ADSS Fiber Optic Cable Specifications Explained | Structure ...

Explore the complete specifications of ADSS fiber optic cables, including structure details, mechanical performance,

### ADSS Fiber Optic Cable Parameters

To ensure optimal performance and network durability, It is essential to understand the key parameters of ADSS fiber

### Key Technical Parameters of ADSS Optical Cables

ADSS optical cables operate in an overhead configuration characterized by long-span, two-point support (typically

### ADSS optical fibre cable

These FlexTube® outdoor All Dielectric Self-Supported (ADSS) optical fibre cables are optimized for aerial installation and for

## Contact Us

For more information, pricing, or custom solutions, please contact us:

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