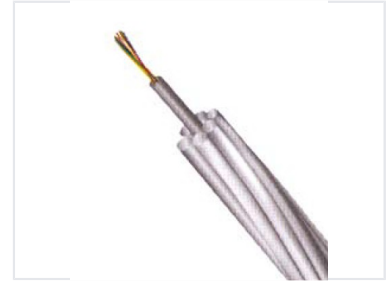


Optical Ground Wire Cable for Power Transmission

Optical Ground Wire (OPGW) cable is designed for power transmission, integrating grounding and communication functionalities. It features optical fibers for data transmission, surrounded by layers of steel and aluminum wires for conductivity and mechanical strength.



ADDITIONAL IMAGES



Product Overview

Dual-Function Power Transmission Solution

Optical Ground Wire (OPGW) is an advanced composite cable designed for installation on both new and existing power transmission lines. It serves the dual purpose of acting as a traditional overhead ground wire for lightning protection and short-circuit current conduction, while simultaneously providing a high-capacity communication path via integrated optical fibers. This solution is ideal for normal and extra-high voltage power lines, enabling seamless grid monitoring and control.

Technical Construction

Available Structures

- Central Tube OPGW: Maximizes optical fiber excess length in a compact steel tube design.
- Stranded OPGW: Offers secondary excess length with a stainless steel tube diameter consistent with aluminum alloy wires.

Materials Used

Stainless Steel Tube, Aluminum-Clad Steel (ACS), Aluminum Alloy (AA), Optical Fiber

Applications & Benefits

Key Functions

Grounding • Data Communication • Lightning Resistance • Short Circuit Current Conduction

Installation Suitability

- New power line installations
- Retrofitting old power lines
- Normal voltage power lines
- Extra high voltage power lines