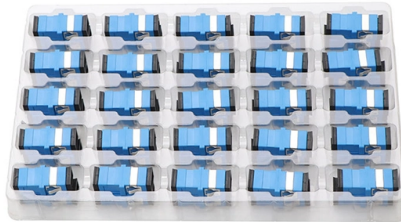


What model is the 24-core OPGW optical cable



Overview

The "24 core" refers to 24 individual optical fibers within the cable, typically housed in stainless steel loose tubes.

Key Takeaways

Common 24-core OPGW optical cable models include OPGW-24B1-50, OPGW-24B1-60, OPGW-24B1-80, OPGW-24B1-90, and OPGW-24B1-100, designed for dual functions of grounding and high-speed optical communication. Overview of 24-Core OPGW CablesA 24-core OPGW cable integrates optical fibers within the overhead ground wire of high-voltage transmission lines, providing both grounding protection and telecommunication capabilities. The optical fibers are typically single-mode, compliant with ITU-T G.

652 standards, and operate at wavelengths of 1310 nm and 1550 nm with low attenuation (0.35 dB/km and 0.25 dB/km respectively),.

This dual-purpose design reduces construction costs and simplifies installation, as the cable serves as both a ground wire and a communication medium.

Cable Structure



Central Tube: Stainless steel or aluminum tube houses the 24 optical fibers, often filled with hydrogen-absorbing gel to prevent fiber degradation. **Protective Layers:** Fibers are coated with UV-curable acrylate and enclosed in a PBT tube for mechanical protection and thermal stability. **Metal Reinforcement:** Surrounding the central tube are aluminum-clad steel (ACS) wires or a combination of ACS and aluminum alloy wires, providing tensile strength, lightning resistance, and corrosion protection.

Outer Sheath: Aluminum or aluminum-coated steel wires form the outer layer, ensuring electrical conductivity and mechanical durability.

Common Models and Specifications

Typical 24-core OPGW models include: OPGW-24B1-50, OPGW-24B1-60, OPGW-24B1-80, OPGW-24B1-90, OPGW-24B1-100. These models differ in diameter, weight, and mechanical strength, allowing adaptation to various high-voltage lines (66kV–500kV) and environmental conditions, including coastal or chemically aggressive areas.

Applications 24-core OPGW

W cables are used for: High-voltage transmission line grounding and lightning protection Voice, data, and video communication over power lines Monitoring systems such as lightning waveform detection, unmanned substation monitoring, and power line operation systems Upgrading or replacing old transmission lines without extensive new infrastructure Advantages Dual functionality: Combines grounding and communication in one cable. High reliability: Fibers are protected against environmental hazards like lightning, short circuits, and extreme weather. Long service life: Superior mechanical and electrical properties ensure durability.

Cost-effective installation: Reduces construction time and maintenance costs. 24-core OPGW cables are widely manufactured and exported, with companies offering customization based on client requirements, including fiber type, cable diameter, and mechanical specifications.

Article Content

24 Core OPGW Cable Specifications Everything You Need to Know

The "24 core" refers to 24 individual optical fibers within the cable, typically housed in stainless steel loose tubes. This fiber count supports multiple communication channels, enabling real

High Quality opgw cable|fiber optic ground wire|opgw

OPGW cable features 24 cores of single-mode (SM) optical fibers. The fibers adhere to the G652D standard, which is widely used for long-distance

24 Core OPGW Cable_HuaDong Cable & Wire

What is 24 Core OPGW Cable ? The Central Tube Optical Ground Wire (OPGW) is surrounded by single or double layers of aluminum clad steel wires (ACS) or mix

Common Models of OPGW Optical Cable 24 Cores

OPGW optical cable 24-core common specifications and models: OPGW-24B1-50, OPGW-24B1-60, OPGW-24B1-80, OPGW-24B1-90, OPGW-24B1-100.

OPTICAL GROUND WIRE (OPGW)

Both ends of OPGW shall be securely fastened to drum and sealed with a shrinkable cap. The required marking shall be printed with a weather-proof material on the outsides of drum according to

OPGW 24 & 48 Core Specifications | PDF | Fibers | Optical Fiber

This document provides specifications for two types of OPGW fiber optic cables: a 24 core cable and a 48 core cable. Both cables use single mode fibers housed within loose buffer tubes made of stainless

Minicore OPGW Fiber Optic Cable | Specs & Compatibility | AFL EMEA

Explore AFL Minicore OPGW Fiber Optic Cable. Compare specifications, compatibility and options to support reliable fiber and network infrastructure deployments.

Opgw Optical Cable 24 Core Optical Fiber Composite Overhead

Through advanced equipment, strict material selection and exquisite workmanship, the OPGW and power optical cables produced by the company are of high quality. The company won

Alcatel Cable Guide for Submarine & Power Applications

Explore Alcatel Submarine Networks' cable portfolio: submarine comms, offshore wind power cables, OPGW/ADSS utility solutions, and fiber sensing tech—plus 2026 market trends and sourcing options.

OPGW Cable Specifications and Installation | PDF | Optical Fiber ...

This document provides information on OPGW (Optical Ground Wire) cables. It discusses that OPGW cables serve the dual purpose of acting as both an earthwire and optical fibre cable on transmission

Optical Power Ground Wire OPGW Cable Single Mode Fiber Optic Cable ...

AITONG's OPGW cables use good stainless steel tube production technology, the tube is filled with water blocking compounds, which can effectively protect the optical fiber. Good compactness and

Top 15 Fiber Optic Manufacturers (2026 Global Ranking)

An authoritative 2026 guide to the top 15 fiber optic manufacturers — from Corning and Prysmian to Fujikura and LS Cable — with headquarters, tech focus, and flagship products.

ADSS/OPGW Metal Junction Box

FOSC Metal Joint Junction Box For Pole and Tower ADSS/OPGW 12, 24, 48, up to 144 Cores Aerial Fiber Optic Cable Splice Closure, Contact Us for Details Now!

OPGW Cable Price

Discover OPGW price deals on 12-288 core fiber optic cables for 110KV-500KV power lines. CE/ISO certified, single mode G652D, aluminum-steel construction.

OPGW Optical Power Line Ground Wire 144 Core AS AA Wire 50

OPGW Optical Power Line Ground Wire 144 Core AS AA Wire 50 220KV Hilos Aire Libre Redes Aluminum Wire De Fibra Optica Cable No reviews yet \$0.14 2,000 - 9,999 meters

OPGW 24 & 48 Core Specifications | PDF | Fibers | Optical Fiber

The 24 core cable has 18 aluminum alloy wires for strength members, while the 48 core cable has 17 strength members. Key specifications include fiber counts, coating materials, attenuation coefficients,

How to Select the Right ADSS Cable for Your Project | ADSS Fiber Cable ...

Learn how to select the right ADSS fiber optic cable based on span length, voltage level, and weather conditions. This technical guide compares common models like ADSS-12J, ADSS-24,

OPGW Cable With 24 Single Mode Optical Fibers

OPGW 24 Core Cable - Product Overview This OPGW Cable With 24 Single Mode Optical Fibers is designed especially for the purpose of fulfilling the requirements of the electrical network, mechanical

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

