

24-core OPGW optical cable weight



Overview

This document provides specifications for two types of OPGW fiber optic cables: a 24 core cable and a 48 core cable.

Key Takeaways

The typical weight of a 24-core OPGW cable ranges from approximately 0.238 kg/m to 0.316 kg/m, depending on design and materials.

A 24-core Optical Ground Wire (OPGW) cable combines the functions of a grounding wire and an optical fiber communication medium. It generally consists of a central stainless steel tube housing the optical fibers, surrounded by aluminum-clad steel (ACS) wires and sometimes aluminum alloy wires for mechanical strength and conductivity. The cable is designed to withstand environmental stresses such as wind, ice, and lightning, while protecting the optical fibers inside.

Typical Weight

- HuaDong 24-core OPGW: The weight is generally in the range of 0.238–0.316 kg/m, depending on the number of aluminum and steel layers and the overall cable diameter.
 - AFL CentraCore 24-core OPGW: Similar designs with a central stainless steel tube and aluminum pipe show approximate weights around 0.238–0.316 kg/m, with slight variations based on conductor cross-section and mechanical reinforcement.
- Additional Specifications
- Overall Diameter: Typically around 11–12 mm for 24-core designs.

- Construction: Central stainless steel tube, aluminum pipe, ACS wires, and optional aluminum alloy wires.

- Applications: High-voltage transmission lines (≥ 110 kV), power line protection systems, unmanned substation monitoring, and communication networks .

Notes

The exact weight can vary depending on manufacturer, strand configuration, and additional protective layers. For precise engineering calculations, it is recommended to consult the manufacturer's datasheet for the specific 24-core OPGW cable model being used . This weight information is essential for structural support calculations, reel handling, and installation planning for overhead transmission lines.

Article Content

24 Core OPGW Cable_HuaDong Cable & Wire

The Central Tube Optical Ground Wire (OPGW) is surrounded by single or double layers of aluminum clad

CentraCore OPGW Cable | Central Tube Optical

AFL's CentraCore OPGW (Optical Ground Wire) features a central tube design that protects fibers while

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

OPGW Specifications and Testing Standards | PDF | Optical Fiber ...

This document provides specifications for an optical fiber overhead ground wire (OPGW) cable. It lists general requirements

AlumaCore Optical Ground Wire (OPGW)

Optical Ground Wire (OPGW) is a dual functioning cable. It is designed to replace traditional static / shield / earth wires on overhead

High Quality opgw cable|fiber optic ground wire|opgw optical ground ...

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

OPGW Cable With 24 Single Mode Optical Fibers

With proper adjustments to the cable's diameter, weight, mechanical strength, and ability to withstand short circuit conditions, we

Optical Fiber Composite Overhead Ground Wire (OPGW)

Two or three stainless steel optical tubes are helically stranded in the inner layer of a multiple-layer cable. The multi loose tube type

AlumaCore Optical Ground Wire (OPGW) 24 Fiber

Beginning with optical ground wire (OPGW), introduced in 1984 as AFL's flagship product, the line now

Optical Fiber Composite Overhead Ground Wire (OPGW)

OPGW is mainly applied in communication line of newly constructed high voltage transmit electricity system with 35 KV or above, or

OPGW cables

Technical data er request. Optical unit composed by 1 to 3 stranded stainless steel tubes Double or triple armour layers available un

Latest OPGW Cable Price List

A 24-core OPGW cable is estimated to cost around RMB 15,000 per kilometer. A 72-core OPGW cable might reach

NT-OPGW-12S.cdr

Only increase the cross-sectional area of the metal, which leads to the increase of cable diameter and cable weight, which raises

OPGW Conductor Specifications and Guidelines

1. The document discusses specifications for overhead power lines, including requirements for conductors, optical fibers, and

AlumaCore Optical Ground Wire (OPGW) 24 Fiber Count

SCADA networks AFL's portfolio of fiber optic cable products is unmatched. Beginning with optical ground wire (OPGW), introduced

What Are the Specifications and Standards for... | ABPTEL

OPGW cables are specialized cables that combine the functions of a ground wire for electrical protection and a fiber

AlumaCore Optical Ground Wire (OPGW)

AFL's AlumaCore OPGW (Optical Ground Wire) combines lightweight aluminum construction with integrated fiber optics for

1. 3117-41006FXXCL

Aluminium Tube Optical Fibre Jelly Compound Steel Tube Bend Radius (Short Term)
20D Bend Radius (Long Term) 10D Operating

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

