

OPGW Cable-24B1-111 [47.5;125.0]

OPGW Cable in Nepal

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Details

OPGW Cable – 24B1-111 [47.5;125.0]

OPGW (Optical Ground Wire) cable is used in overhead transmission lines, combining grounding and fiber optic communication in a single cable. This model supports reliable power line protection and high-speed optical data transmission for telecom and utility networks.

Technical Data

According to IEC, IEEE, DL/T 832, GB/T 7424.4 standards

Parameter	Value
Stranding Direction	Right hand (Z-stranding)
Cable Diameter	14.10 mm
Cable Weight	400 kg/km
Supporting Cross Section	111.3 mm ²
AS Wire Section	37.39 mm ²
AA Wire Section	73.89 mm ²
UTS (Ultimate Tensile Strength)	49.1 kN
Rated Tensile Strength (RTS)	47.5 kN
Elastic Modulus	79.8 kN/mm ²

Thermal Expansion	19.6 ×10 ⁻⁶ /°C
Max Working Stress (40% RTS)	170.9 N/mm ²
Everyday Stress (EDS)	77 – 106.8 N/mm ²
Ultimate Stress (60% RTS)	256.4 N/mm ²
DC Resistance	0.348 Ω/km
Short Circuit Current (1s)	11.18 kA
Short Circuit Capacity (I ² t)	125 kA ² s
Min Bending Radius (Installation)	282 mm
Min Bending Radius (Operation)	211 mm
Strength to Weight Ratio	12.1 km

Temperature Range

Condition	Range
Installation	-10°C to +50°C
Transportation & Operation	-40°C to +80°C

Product Description

OPGW Cable (Optical Ground Wire) is installed on overhead transmission lines to provide grounding protection while carrying fiber optic communication signals.

24B1 indicates the fiber structure and configuration inside the cable.

111 represents the cable design and mechanical parameters.

[47.5;125.0] typically refers to performance or structural range values depending on manufacturer standards.

This cable is ideal for power utilities, telecom backbone networks, and long-distance optical communication systems.

