Photovoltaic grid-connected communication optical cable



Overview

With the advancement of science and technology and the development of smart grids, Optical Ground Wire (OPGW), as a special optical cable that integrates power transmission and communication functions, plays an indispensable role in high-voltage transmission lines. It comprises, amongst others, photovoltaic cables for the cabling of the solar modules, low voltage power cables for the connection to the inverters and to the transformer stations, medium voltage cables for feeding power to the grid as well as earthing cables. This article will explore the. Utility-scale solar "farms" require a distributed control network to monitor and control the production, aggregation and flow of electrical energy from the photovoltaic arrays onto the grid. The design is the same sort of point-to-point Ethernet technology based on single-mode fiber that's used in enterprises and industrial applications, as opposed to the Passive Optical Network (PON) approach used.

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