

# **How to connect the optical fiber of the power base station**





## Overview

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What is an optical connector for a base station?

JAE has been developing optical connectors for base stations since 2000 (Figure 4). Originally, we developed a “relay connector” that connects the base station enclosure panel and wires to the optical transceiver on the board, using optical fibers.

Why is optical fiber important for a substation?

Optical fiber provides the necessary electrical isolation to drastically reduce the risks to people and equipment. Substation operators make it their business to understand vital equipment such as switches and routers in order to specify and select the best product for their applications.

Why do we need optical fiber?

In response, leading power equipment suppliers are introducing faster equipment, including switches and routers, which in turn require the use of optical fiber, the only transmission medium capable of the extremely high bandwidth - information-carrying capacity - and transmission speed required by the smart grid.

Can optical fiber be used in power transmission lines?

The use of optical fibers in conjunction with power transmission lines has been employed and developed for several decades. Numerous standards and solutions have emerged and are widely adopted (Moore, 1997, Nanda and Kothari, 1995).



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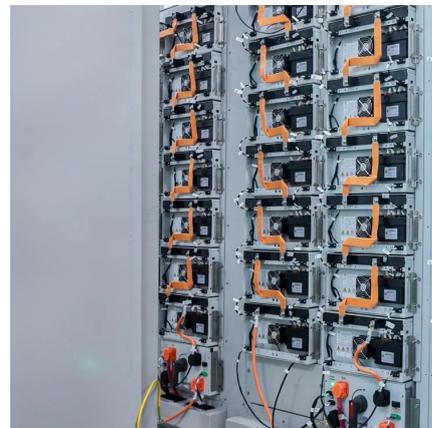


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