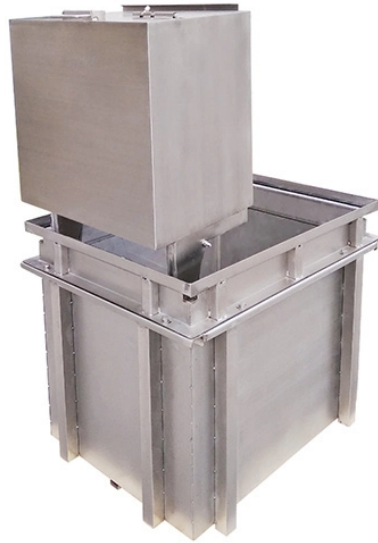


## What is the relationship between optical modules and RRUs



### Overview

Telecom operators rely on optical modules to interconnect devices within mobile communication base stations. Driven by the rapid growth of big data, blockchain, cloud computing, the Internet of Things (IoT), artificial intelligence (AI), and 5G technology, global. Optical modules used in Remote Radio Units (RRUs) for CPRI applications are required to support industrial temperature ranges, primarily because RRUs operate in diverse outdoor environments with extreme temperature variations. CPRI (Common Public Radio Interface) defines the interface relationship. RRU (Remote Radio Unit): interface with Antenna in one side and with BBU in the another side. Converts the RF signal into data signal and the vice versa. Filtering and amplification of RF signal. All devices need to be connected to a fiber network that provides the data nits, the RRU, and Baseband Units, the BBU.

## What is the relationship between optical modules and RRUs



Enhances signal strength and coverage, reducing the need for separate RRUs. Here is a technical diagram comparing AAU, RRU, and BBU in a telecom network.



The optical interface link is also known as CPRI (Common Public Radio Interface). CPRI is a interface protocol developed by combination of major telecom equipment's manufacturing company.



Both the BBU and RRU are connected using fiber optic cables to transport digital data and control information. Initially, the Common Public Radio Interface (CPRI) ...



Fault handling and supervision of the RRUs and optical link is performed so that the operator can diagnose faults in the vast majority of cases without having to visit the RRU site or inspect the optical ...



Optical modules used in Remote Radio Units (RRUs) for CPRI applications are required to support industrial temperature ranges, primarily because RRUs operate in diverse outdoor environments with ...



Telecom operators rely on optical modules to interconnect devices within mobile communication base stations. Base stations typically consist of Remote Radio Units (RRUs) and ...



RRU functions include transmitting and receiving signals, providing connectivity between user equipment, and interfacing between optical and electromagnetic links using ports.



The optical module converts electrical signals into optical signals at the transmitter side, transmits them to the remote wireless unit through optical fiber, and then converts the received optical signals into ...



Both the BBU and RRU are connected using fiber optic cables to transport digital data and control information. Initially, the Common Public Radio Interface (CPRI) was developed as an interface ...



RRUs also have operation and management processing capabilities and a standardized optical interface to connect to the rest of the base station/baseband unit. This will be increasingly true as LTE and ...

## Contact Us

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