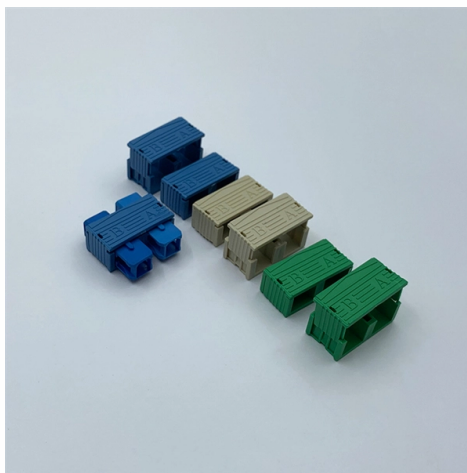


The optical module speeds of RRU and BBU must be consistent



Overview

When using the system, the optical modules of standard wavelengths (commonly used 1550nm or 1310nm) of BBU/DU or RRU/AAU (commonly known as gray light module or white light module) need to be replaced with color optical modules of the same rate. For example, a macro station has 3 RRUs in a certain band of S111 stations and 6 transceiver ports from BBU to RRU, a 6-way OTM (optical terminal multiplexer) on each side of BBU and RRU can combine the transceiver signals between BBU and RRU into a single fiber, as shown in Figure 1. Since OTM is. The system can handle incredibly low latency times below 100 microseconds and offers pretty impressive bandwidth capabilities reaching around 24.3 gigabits per second per sector. This helps maintain consistent performance across different network conditions. The Telecom Network Components: BBU, RRU, and AAU Explained Understanding the key components of a modern telecom network is essential for grasping how 4G and 5G systems function. Both the BBU and RRU are connected using fiber optic cables to transport digital data and control information. The BBU is small and exquisite, with low power consumption, while the RRU is large and has high power consumption. Because the base station is divided into two parts to work. The Remote Radio Unit (RRU) sits right next to antennas where it transforms those baseband signals into actual radio waves like 2.



Article Content

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Protocol and Timing Requirements: CPRI operates under a strict timing regime. It requires ultra-low, consistent latency to maintain synchronization between the BBU and multiple ...

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Below is a breakdown of the BBU (Baseband Unit), RRU (Remote Radio Unit), and AAU (Active Antenna Unit)—their roles, placement, connectivity, and relevance in evolving technologies.

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In this blog, ETU-LINK will talk about 4G base stations and common types of optical modules. The base station can be divided into two modules: the RRU for transmitting signals and the BBU for processing

How Do BBU and RRU Collaborate Efficiently in Base Stations?

The CPRI standard works alongside bidirectional fiber to keep things synchronized between the baseband processing happening in the BBU and the actual RF work done by the RRU.

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AAU, RRU, and BBU are key components in a telecom network, particularly in modern wireless communication systems like 4G and 5G. Here's a breakdown of each:

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To achieve higher speeds and lower latency, massive increases in capacity are required, which necessitate the use of a large amount of spectrum. To minimise impedance differences throughout

Did you know? Based on the schematic diagram watermarked_img

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BBU Optical Module Transmit/Receive Fault

1. BBU Optical Module Transmit/Receive Fault 2. RF Unit Maintenance Link Failure The results of this alarms was restarting of the RF unit. After combining the RRU log analysis and the alarm of the

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Understanding AAU, RRU, and BBU in telecom networks

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