

Article Overview

BBU optical module failures typically occur due to faulty SFP modules, misconfigured transceivers, unstable RRU power, or poor fiber connections, and can be resolved through systematic inspection and corrective actions.

Common Causes

- o SFP Module or Transceiver Issues: Incompatible or misconfigured SFP modules can trigger CPRI interface errors. For example, some 2.67G-SFP-2D transceivers have EEPROM settings that limit bandwidth below the required 2.4576 Gbps, causing the BBU to fail in establishing a proper link with the RF unit .
- o Fiber or Electrical Connection Problems: Loose or improperly installed optical modules, connectors, or cables between the BBU and RF units can result in transmit/receive faults .
- o RRU Power Instability: If the RRU board loses power or experiences voltage fluctuations, it can trigger alarms on the BBU, including optical module faults .
- o Hardware Malfunctions: Faulty BBU interface boards, RF units, or inter-BBU optical modules can also cause these alarms .

Troubleshooting Steps

- o Identify the Main Alarm: Determine whether the primary alarm is the BBU CPRI interface error or RF Unit Maintenance Link Failure, as resolving the main alarm often clears secondary alarms .
- o Check SFP Module Status: Use MML commands (e.g., DSP SFP) to verify the module's operational parameters and ensure compatibility with Huawei requirements .
- o Inspect Fiber Connections: Physically check and reseal fiber cables at both BBU and RF unit ends to ensure proper contact .
- o Verify RRU Power: Confirm stable power supply from the DC distribution unit to the RRU and check for any voltage irregularities .
- o Perform Loopback Tests: Connect RX and TX ports on the BBU and RRU to perform loopback tests, verifying the optical link integrity .
- o Reset or Replace Hardware: If alarms persist, reset the RRU, replace the optical module on the BBU or RRU, or reinstall the original boards as needed .

Preventive Measures

- o Ensure SFP modules are compatible with the BBU and configured correctly.
- o Maintain secure fiber connections and regularly inspect for wear or damage.
- o Monitor RRU power stability to prevent unexpected resets.
- o Keep firmware and EEPROM settings updated to match network requirements. By following these steps, most BBU optical module failures can be diagnosed and resolved, restoring normal CPRI link operation and RF unit functionality.

Bbu optical module failure

Common causes include hardware faults, link failures, resource shortages, configuration mismatches, and signal quality problems.

Replace the BBU module in three months. If the alarm persists=> Step2. Collect related information and contact technical support

A BBU-related alarm may be caused by power supply, optical fiber, RRU, transmission link, software configuration or site

Fill in the fault form with the details of the replaced component. Contact the local Huawei office to handle the faulty component.

A comprehensive guide on Optical Module Failure diagnosis and prevention to maintain

BBU Failure Symptom Log in to DeviceManager and choose System > Hardware > Devices. For a 2 U controller

Contact the local Huawei office to handle the faulty component. 5.10 Replacing the Optical Module The optical module implements

System Health may report a failure for the BBU Sensor Check (was BBU IPMI I2C Check) as displayed in one of the

Alarm Information On the Alarms and Events page of DeviceManager, click the Current Alarms tab. The alarm information BBU Is

Let's compare that with a SFP+ module specifically designed for CPRI links between the BBU and RRH equipment. We will use

If so, this fault is often caused by high insertion loss of the connector or the bending of the optical fiber. If the fault persists, replace

Troubleshooting Guide: (RF Unit Maintenance Link Failure & BBU CPRI Interface Error) When facing alarms related to RF Unit

How to clear Unavailable Optical Module Alarm | SFP Module Alarm | ZTE BBU Current Alarms In this video you can

Bbu optical module failure

Discover the most frequent optical transceiver failures and learn how to diagnose, test, and solve them using proven

When Dell PowerStore encounters an issue, an error alert is generated to help identify the issue. This article explains

In this blog, ETU-LINK will talk about 4G base stations and common types of optical modules. The base station can be divided into

Web: <https://bssoda.pl>

