IBM 39Y9316

IBM BladeCenter OPM Instruction Manual

Model: **39Y9316**
Brand: **IBM**

1. Product Overview

The IBM BladeCenter OPM (Optical Pass-Through Module) component is designed to integrate seamlessly within an IBM BladeCenter chassis, facilitating optical connectivity for various server blades. This module is crucial for high-speed data transfer and network aggregation within a blade server environment, ensuring efficient communication and resource sharing.

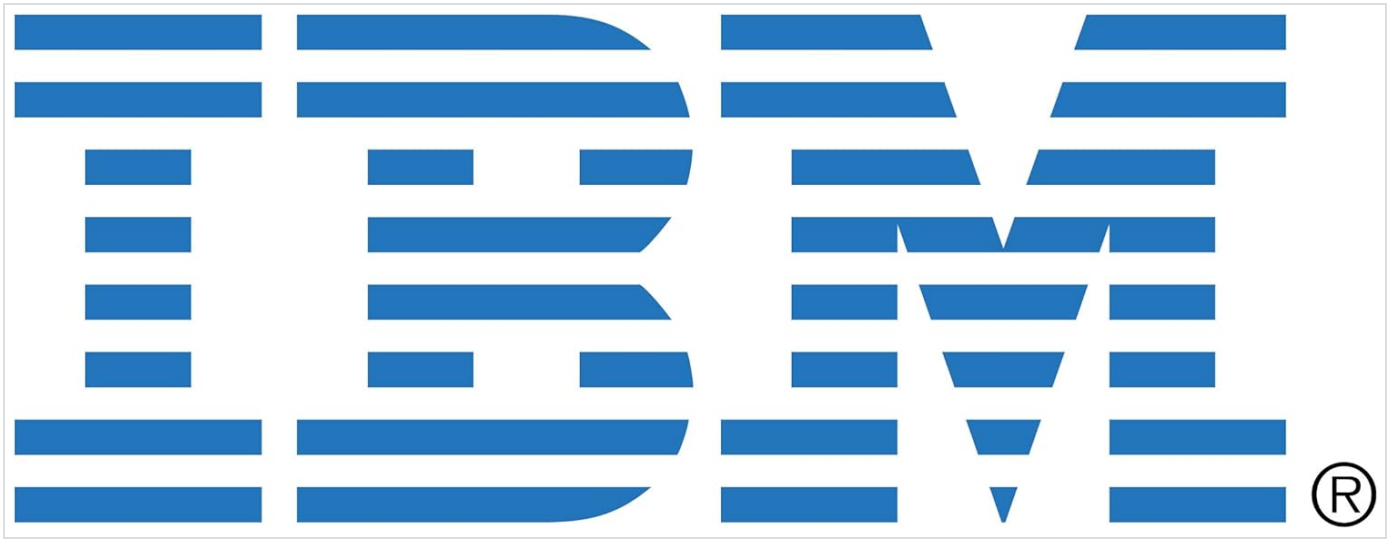

Figure 1: Front view of the IBM BladeCenter OPM component. This image displays the physical appearance of the module, typically featuring connectors and indicators for integration into a BladeCenter chassis.

2. Setup and Installation

Proper installation of the OPM component is essential for optimal performance and system stability. Follow these general guidelines for setup:

1. **Preparation:** Ensure the BladeCenter chassis is powered off and disconnected from all power sources before beginning installation. Refer to your BladeCenter chassis manual for specific safety procedures.
2. **Module Slot Identification:** Identify an available I/O module slot in the rear of the BladeCenter chassis. The OPM

module is designed to fit into specific I/O bays.

3. **Insertion:** Carefully align the OPM module with the chosen slot. Slide the module into the slot until it is fully seated. Apply firm, even pressure to ensure proper connection with the chassis backplane.
4. **Securing the Module:** Once seated, secure the module using any provided latches or screws, as per the BladeCenter chassis design.
5. **Cabling:** Connect the necessary fiber optic cables to the OPM module's ports. Ensure that the cables are correctly routed and secured to prevent accidental disconnection.
6. **Power On:** After installation, reconnect power to the BladeCenter chassis and power it on. Observe the module's status indicators for proper initialization.

For detailed, chassis-specific installation instructions, consult the documentation provided with your IBM BladeCenter chassis.

3. Operating Principles

The IBM BladeCenter OPM functions as a pass-through module, meaning it provides direct optical connectivity between the server blades and external network devices without performing any switching or routing functions itself. Its primary role is to extend the optical network infrastructure directly to the individual blades.

- **Direct Connectivity:** Each optical port on the OPM typically corresponds to a specific blade's optical interface, allowing for dedicated high-bandwidth connections.
- **Network Integration:** The OPM integrates the BladeCenter system into an existing fiber optic network, supporting various optical standards and speeds depending on the specific module configuration.
- **Status Indicators:** The module may feature LED indicators to display link status, activity, and operational health for each port. Refer to the module's specific documentation for LED interpretations.

No direct user configuration is typically required for the OPM itself, as its function is primarily passive pass-through. Configuration of network settings will occur on the connected server blades and external network equipment.

4. Maintenance

The IBM BladeCenter OPM is designed for reliability and requires minimal maintenance. Adhering to the following practices can help ensure its longevity and optimal performance:

- **Environmental Control:** Ensure the BladeCenter chassis operates within recommended temperature and humidity ranges to prevent component degradation.
- **Dust Management:** Regularly inspect the BladeCenter chassis and module slots for dust accumulation. Use compressed air or a soft, lint-free cloth to gently clean surfaces and connectors. Avoid using liquids or abrasive materials.
- **Cable Management:** Ensure all fiber optic cables are securely connected and properly routed to prevent strain or damage. Avoid sharp bends in fiber optic cables.
- **Firmware Updates:** While the OPM itself may not have user-updatable firmware, ensure that the BladeCenter chassis management module and connected server blades have their firmware kept up-to-date, as this can impact overall system stability and compatibility.

Always power down the BladeCenter chassis before performing any internal cleaning or component handling.

5. Troubleshooting

If you encounter issues with the IBM BladeCenter OPM, consider the following troubleshooting steps:

- **No Link Light:**
  - Verify that the fiber optic cables are securely connected at both the OPM and the external network device.
  - Check the integrity of the fiber optic cables for any visible damage.
  - Ensure the external network device (e.g., switch, router) is powered on and its corresponding port is active.
  - Confirm that the correct type of fiber optic cable (e.g., single-mode, multi-mode) is being used for the OPM and connected devices.
- **Module Not Detected:**
  - Power down the BladeCenter chassis and re-seat the OPM module firmly into its slot.
  - Ensure the module is inserted into a compatible I/O module slot.
  - Check the BladeCenter management module logs for any error messages related to the I/O module.
- **Intermittent Connectivity:**
  - Inspect fiber optic connectors for cleanliness. Dust or debris can significantly degrade optical signals. Use appropriate fiber optic cleaning tools.
  - Verify that the ambient temperature within the BladeCenter chassis is within operational limits.

If issues persist after performing these steps, consult the IBM support resources or a qualified service technician.

6. Specifications

Feature	Detail
Model Number	39Y9316
ASIN	B000FVIJFC
Manufacturer	IBM
Item Weight	2.2 pounds
Package Dimensions	13.7 x 6.9 x 4.7 inches
Date First Available	May 25, 2006

7. Warranty and Support

This IBM BladeCenter OPM component is manufactured by IBM. For information regarding product warranty, technical support, and service options, please refer to the official IBM support website or contact your authorized IBM reseller.

It is recommended to register your product with IBM, if applicable, to receive important updates and support notifications.

For the most current support information, visit theIBM Support Portal.