Supermicro MCP-290-00058-0N

Supermicro Rack Rail Kit MCP-290-00058-0N Installation Manual

Model: MCP-290-00058-0N | Brand: Supermicro

INTRODUCTION

This manual provides detailed instructions for the proper installation, operation, and maintenance of the Supermicro Rack Rail Kit, model MCP-290-00058-0N. This kit is designed for use with Supermicro SC826 E1-R800LPB server chassis in standard server racks. Please read this manual thoroughly before proceeding with installation to ensure safe and correct usage.

SAFETY INFORMATION

Always observe the following safety precautions:

- Ensure the rack is stable and properly secured before installing any equipment.
- Wear appropriate personal protective equipment (PPE) such as gloves to prevent injury.
- Distribute weight evenly within the rack to prevent tipping.
- Do not exceed the maximum weight capacity of the rack or the rail kit.
- Disconnect power from all equipment before installation or maintenance.

PACKAGE CONTENTS

Verify that all components are present in the package. The kit typically includes:

- Left Rack Rail (1)
- Right Rack Rail (1)
- Mounting Screws (Quantity as specified by Supermicro)
- Installation Guide (This document)

If any items are missing or damaged, contact your vendor immediately.

SETUP AND INSTALLATION

This section details the steps required to install the rack rail kit into a standard 19-inch server rack and then mount the server chassis onto the rails.

1. Preparing the Rack

1. **Identify Mounting Points:** Determine the desired rack units (U) for your server chassis. Mark the front and rear mounting holes on the rack posts. Ensure sufficient space for ventilation and cable management.
2. **Secure Rack:** Ensure the server rack is stable and secured to the floor or adjacent racks to prevent movement during installation.

2. Installing the Outer Rails

1. **Attach Front Brackets:** Align the front bracket of one outer rail with the marked mounting holes on the front rack post. Secure it using the provided screws. Do not fully tighten yet.
2. **Extend and Attach Rear Brackets:** Extend the outer rail to reach the rear rack post. Align the rear bracket with the marked mounting holes and secure it with screws.
3. **Adjust and Tighten:** Ensure the rail is level and parallel to the ground. Fully tighten all screws on both front and rear brackets.
4. **Repeat for Second Rail:** Install the second outer rail on the opposite side of the rack, ensuring it is at the same height and parallel to the first rail.

3. Attaching Inner Rails to Chassis

The inner rails are typically pre-attached to the server chassis. If not, follow the server chassis manual for attaching them. Ensure they are securely fastened to the sides of the server chassis.

4. Mounting the Server Chassis

1. **Align Rails:** Carefully align the inner rails on the server chassis with the outer rails installed in the rack.
2. **Slide Chassis In:** Gently slide the server chassis into the rack. Ensure the rails engage smoothly. Do not force the chassis.
3. **Secure Chassis:** Once the chassis is fully inserted, secure it to the front of the rack using the thumbscrews or locking mechanisms provided with the chassis or rails.

OPERATING THE RACK RAIL KIT

The rack rail kit is a passive component designed to facilitate the installation and removal of server chassis. Its operation primarily involves extending and retracting the rails for server access.

- **Extending the Server:** To access the server for maintenance or upgrades, unlock the front securing mechanisms (if present) and gently pull the server chassis forward until the rails are fully extended and locked in place.
- **Retracting the Server:** To push the server back into the rack, disengage the rail locking tabs (usually located on the sides of the inner rails) and carefully push the server chassis back until it is fully seated and secured in the rack.

Always ensure the server is fully secured in either the extended or retracted position to prevent accidental movement.

MAINTENANCE

The Supermicro Rack Rail Kit requires minimal maintenance to ensure long-term reliability.

- **Regular Inspection:** Periodically inspect the rails for any signs of wear, damage, or loose fasteners.
- **Cleaning:** Keep the rail tracks free from dust and debris. Use a dry, lint-free cloth to wipe down the surfaces. Avoid using abrasive cleaners or solvents.
- **Lubrication:** The rails are typically pre-lubricated. If movement becomes stiff over time, a small amount of silicone-based lubricant can be applied to the sliding surfaces. Avoid oil-based lubricants as they can attract dust.
- **Tighten Fasteners:** Re-tighten any loose mounting screws to ensure the rails remain securely attached to the rack.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Server chassis does not slide smoothly.	Misalignment of rails. Debris in rail tracks. Lack of lubrication.	Verify both outer rails are installed at the same height and parallel. Clean rail tracks with a dry cloth. Apply a small amount of silicone-based lubricant.
Rails feel loose or wobbly.	Loose mounting screws. Damaged rail components.	Tighten all mounting screws on the front and rear rack posts. Inspect rails for damage; replace if necessary.
Server chassis cannot be fully inserted or extracted.	Obstruction in the rack. Incorrect rail engagement. Damaged locking mechanism.	Check for cables or other equipment blocking the path. Ensure inner and outer rails are correctly aligned and engaged. Inspect locking tabs; contact support if damaged.

SPECIFICATIONS

Feature	Detail
Model Number	MCP-290-00058-0N
Brand	Supermicro
Compatible Chassis	SC826 E1-R800LPB
Mounting Type	Side Mount
Material	Metal
Finish	Powder Coated

Feature	Detail
Color	Silver
Item Weight	9 pounds (approximate)
Number of Items	4 (referring to kit components)
GTIN/UPC	872182808343

SUPPORT AND WARRANTY

For technical support, warranty information, or to report missing/damaged parts, please contact your Supermicro vendor or visit the official Supermicro website. Keep your purchase receipt and product model number (MCP-290-00058-0N) handy when contacting support.

Note: Specific warranty terms and conditions may vary by region and reseller. Refer to your purchase documentation for details.