Prepare for Router Installation

This article provides guidelines and requirements for preparing your site to install the vEdge 5000 router.

Site Preparation Guidelines

Efficient operation of your vEdge 5000 router requires proper site planning and proper layout of your equipment rack or wiring closet:

- Ensure that the area around the router is kept free of dust and conductive material.
- Follow appropriate airflow guidelines so that the cooling system functions normally.
- Follow ESD prevention procedures to avoid any damage to the router.
- Install the router in an enclosed, secure area allowing only authorized personnel to access the device.

Environmental Requirements

Install the vEdge 5000 router in a dry, clean, temperature-controlled, and well-ventilated environment:

- Maintain ambient airflow for the router to operate normally. The ambient intake air temperature should be in the range 0°C to 40°C (32°F to 104°F). If the airflow is blocked or if the air intake is too warm, the router can get overheated.
- Avoid temperature extremes. Ensure that the router is operating at an ambient temperature not more that 40°C (104°F) at sea level. For higher altitudes, a derating of 1.50°C per 1,000 feet applies.
- High humidity conditions can cause moisture to penetrate into the chassis. The device supports 10% to 85% humidity levels, non-condensing.

Rack Requirements

You can mount the vEdge 5000 router in a four-post rack using slide rails. Table 1 provides the rack requirements for the router.

<table>
<thead>
<tr>
<th>Rack Requirement</th>
<th>Guidelines</th>
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<tbody>
<tr>
<td>Rack type</td>
<td>Use a four-post rack that meets the size requirements for the router, provides bracket holes or hole patterns spaced at 1 U (1.75 in. or 4.45 cm) increments, and is strong enough to support the weight of the router.</td>
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</table>
### Rack Requirement

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<td>Mounting brackets</td>
<td>Ensure that the holes in the mounting brackets are spaced at 1 U (1.75 in. or 4.45 cm). This allows you to mount the router in any location in the rack.</td>
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<tr>
<td>Rack size</td>
<td>It is recommended that the rack comply with the size and strength standards of a 19-inch rack as defined in <em>Cabinets, Racks, Panels, and Associated Equipment</em> (document number EIA-310–D), published by the Electronics Industry Association (<a href="http://www.eia.org">http://www.eia.org</a>). Ensure that the rack rails are spaced widely enough to accommodate the external dimensions of the chassis and that the outer edges of the front mount brackets extend the width of the chassis to 19 in. (48.2 cm). You must also ensure that the spacing of rails and adjacent racks allows for the proper clearance around the router and rack.</td>
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<tr>
<td>Rack secured to building structure</td>
<td>For maximum stability, secure the rack to ceiling brackets and to floor brackets.</td>
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### Airflow Requirements

When planning your site for installing the vEdge 5000 router, allow enough clearance around the installed router. Since the router works with a front-to-back airflow there are no clearance requirements for the sides, but it is recommended that you provide at least 3 in. of clearance at the back.

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### Additional Information

*Install the vEdge 5000 Router*