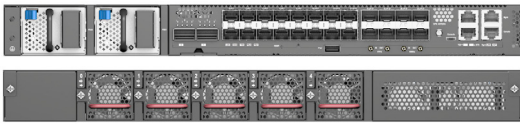


Quick Start Guide

26-Port 25G/100G Cell Site Gateway Router
AS7316-26XB

Package Contents



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1. Cell Site Gateway Router AS7316-26XB
2. Rack Mounting Kit—2 brackets and 8 screws
3. Power cord (included with AC PSUs only)
4. Grounding kit—grounding lug, 2 screws, and 2 washers

5. Ring lugs (x4) (included with DC PSUs only)
6. Power cord ties (x2) (included with AC PSUs only)
7. Documentation—*Quick Start Guide* (this document) and *Safety and Regulatory Information*

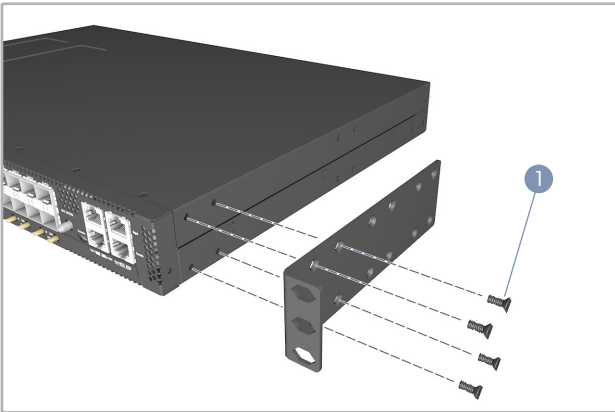


Note: The router has the Open Network Install Environment (ONIE) software installer pre-loaded on the router, but no switch software image. Information about compatible switch software can be found at www.edge-core.com.



Note: The drawings in this document are for illustration only and may not match your particular model.

1 Attach the Brackets

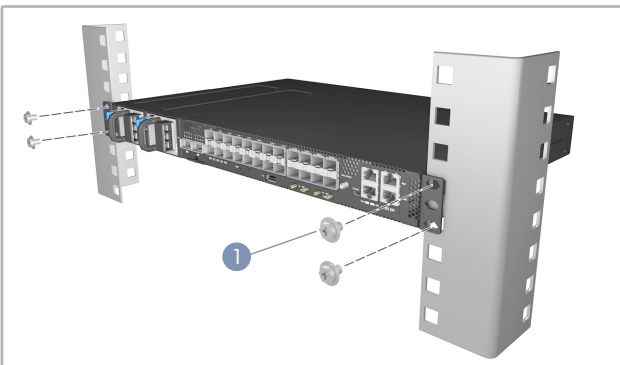


1. Attach each of the brackets to the router using four of the included bracket screws.



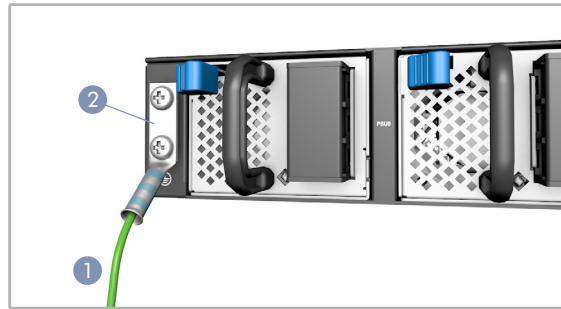
Caution: Installing the router in a rack requires two people. One person should position the router in the rack, while the other person secures it using the rack screws.

2 Mount the Router in a Rack



1. Use the screws and cage/clip nuts supplied with the rack to secure the router in the rack.

3 Ground the Router



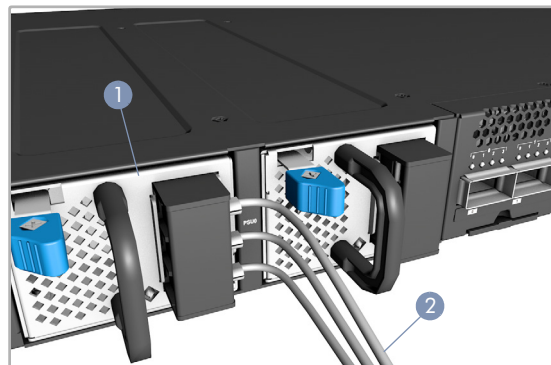
1. Ensure the rack is properly grounded and in compliance with ETSI ETS 300 253. Verify that there is a good electrical connection to the grounding point on the rack (no paint or isolating surface treatment).
2. Attach the grounding wire (#6 AWG) to the grounding point on the router's rear panel. Then connect the other end of the wire to rack ground.



Caution: The earth connection must not be removed unless all supply connections have been disconnected.

Attention: Le raccordement à la terre ne doit pas être retiré sauf si toutes les connexions d'alimentation ont été débranchées.

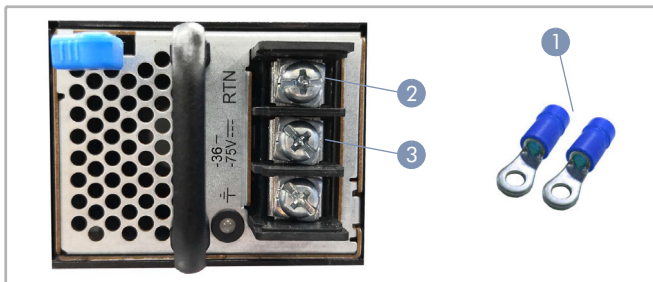
4 Connect Power



1. Install one or two AC or DC PSUs in the router.
The router supports up to two PSUs that must have the same matching airflow direction as the installed fan trays.
2. Connect an external AC or DC power source to the PSUs.

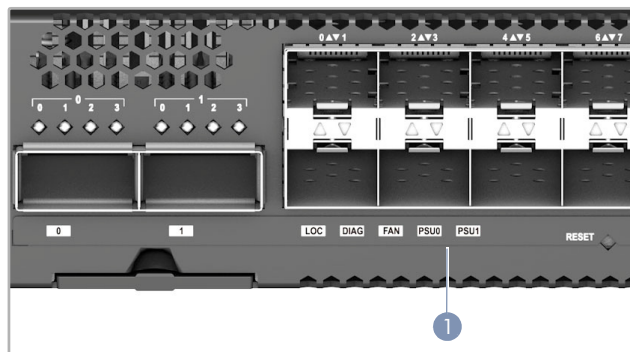


Caution: Use a UL/IEC/EN 60950-1 certified power supply to connect to a DC converter, and a #14 AWG (for -36 VDC to -72 VDC PSU) wire to connect to a DC PSU.
Attention: Utilisez une alimentation certifiée UL/IEC/EN 60950-1 pour le connecter à un convertisseur CC et un câble AWG #14 (pour -36 VDC à -72 VDC) pour vous connecter à une alimentation CC.



1. Use the DC ring lugs included with the DC PSU.
2. Connect the DC return wire.
3. Connect the -36 – -72 VDC wire.

5 Verify Router Operation



1. Verify basic router operation by checking the system LEDs.
 When operating normally, the PSU0/PSU1, Diag, and Fan LEDs should all be on green.

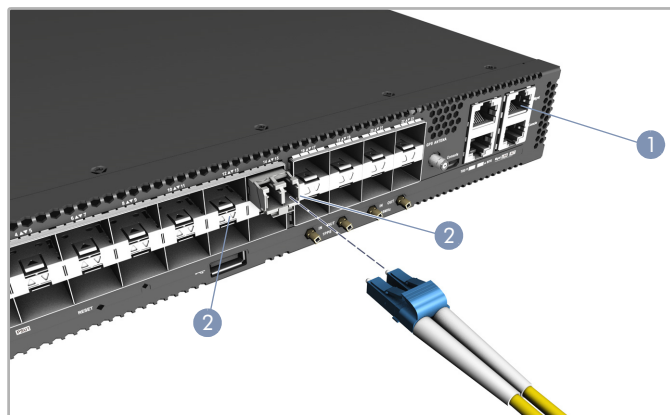
6 Perform Initial System Boot

1. If the network operating system (NOS) installer is located on a network server, first connect the RJ-45 Management (Mgmt) port to the network using 100-ohm Category 5, 5e or better twisted-pair cable. (Not required if the NOS installer is located on attached storage.)
2. Boot the router. Wait for the ONIE software to locate and execute the NOS installer, and then wait for the installer to load the NOS software image.
 Subsequent router boots will bypass ONIE and directly run the NOS software.



Note: Refer to the network operating system (NOS) installer and NOS documentation for details on software options and set up for ONIE.

7 Connect Network Cables



1. For the RJ-45 Management port, connect 100-ohm Category 5, 5e or better twisted-pair cable.
2. Connect DAC cables to the SFP28/QSFP28 slots. Or first install SFP28/QSFP28 transceivers in the slots and then connect fiber optic cabling to the transceiver ports.
3. As connections are made, check the port status LEDs to be sure the links are valid.

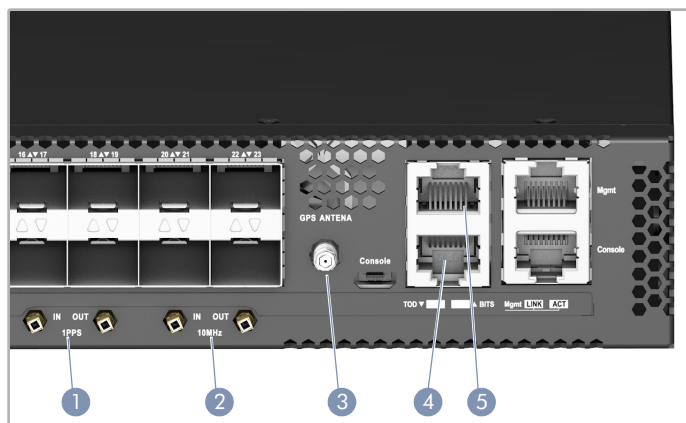
For the SFP28 ports:

- Green — 25 Gbps mode
- Amber — 10 Gbps mode

Each QSFP28 port has four LEDs that indicate valid links in the following modes:

- 1 LED Green — 100 Gbps mode
- 1 LED Blue — 40 Gbps mode
- 1-4 LEDs Amber — 25 Gbps breakout mode (four lanes)
- 1-4 LEDs Purple — 10 Gbps breakout mode (four lanes)

8 Connect Timing Ports and GPS Antenna



1. Use coax cables to connect the 1-pulse-per-second (1PPS) in/out ports to other synchronized devices.
2. Use coax cables to connect the 10 MHz in/out ports to other synchronized devices.
3. Attach an external GPS antenna to the GPS Antenna port for clock synchronization with GPS time.
4. Use a shielded cable to connect the Time-of-Day (ToD) port to other devices that use ToD synchronization signals.
5. Use a shielded cable to connect the Building-Integrated Timing Supply (BITS) port to other devices that use BITS synchronization signals.

Hardware Specifications

Switch Chassis

Size (WxDxH)	438.4 x 299.8 x 43.25 mm (17.26 x 11.8 x 1.7 in.)
Weight	6.15 kg (13.56 lb), with two installed PSUs
Temperature	Operating: 0° C to 45° C (32° F to 113° F) Storage: -40° C to 70° C (-40° F to 158° F)
Humidity	Operating: 5% to 95% (non-condensing)
Power Consumption	265 Watts maximum

AC PSU

Power Rating	100–240 VAC, 50-60 Hz, 400 Watts
AC Input	100–240 VAC, 50-60 Hz, 6–3 A

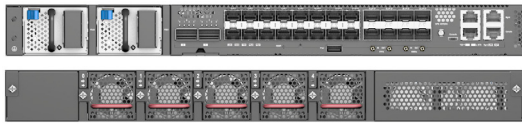
48 VDC PSU

Power Rating	48 VDC, 400 Watts
DC Input	-36 V – -72 V, 14–7 A

Regulatory Compliances

Emissions	EN 55032:2015+AC:2016, Class A EN 61000-3-2:2014, Class A EN 61000-3-3:2013 FCC Class A VCCI Class A
Immunity	EN 55024:2010+A1:2015 IEC 61000-4-2/3/4/5/6/8/11
Safety	UL (CSA 22.2 No 60950-1 & UL60950-1) CB (IEC/EN60950-1) CCC

包装清单



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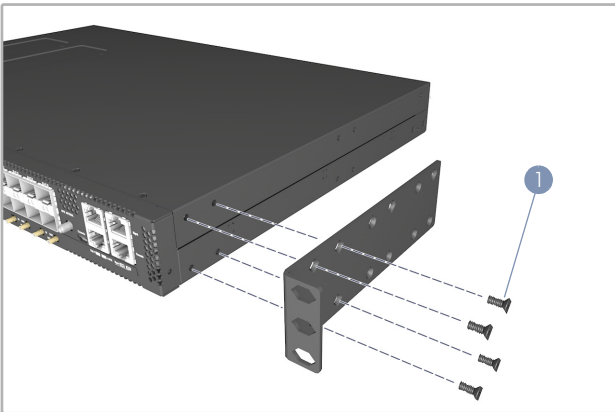
1. 路由器 AS7316-26XB
2. 机架安装套件 — 2 个托架和 8 个螺丝
3. 电源线（仅随交流 PSU 附带）
4. 接地套件 — 接地片、2 个螺丝和 2 个垫圈

5. 环形接地片（4 个）（仅直流电源装置附带）
6. 电源线扎带（2 条）（仅交流电源装置附带）
7. 文档 — *快速入门指南*（本文档）以及 *安全和管制信息*

i 注意：本路由器上已预装了 Open Network Install Environment (ONIE) 软件安装程序，但没有路由器软件映像。在以下网站可以找到有关兼容交换机软件的信息：www.edge-core.com。

i 注意：本文档中的图样仅供参考，与不并特定型号匹配。

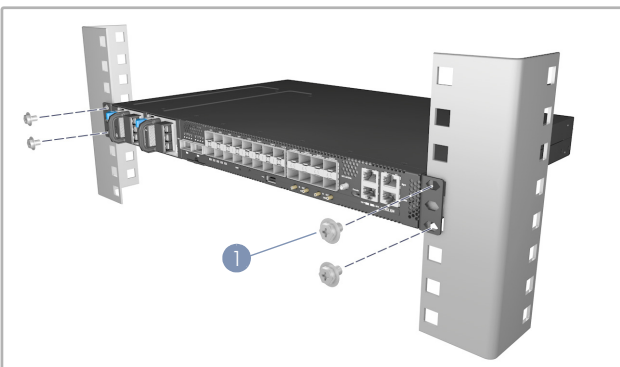
1 安装支架



1. 使用附带的四个支架螺丝将支架都安装到路由器。

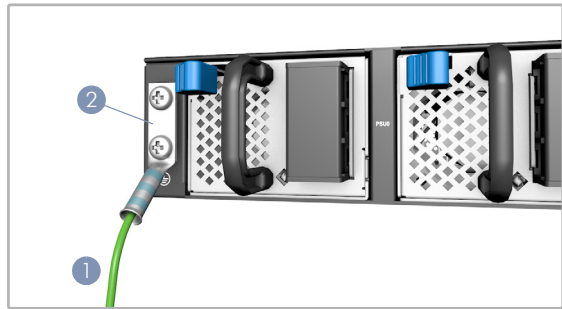
! 小心：将此路由器安装在机架中时需要两个人。一个人应在机架中托住路由器，另一个人使用机架螺丝固定它。

2 在机架中安装路由器



1. 使用机架附带的螺丝和笼架 / 夹具螺母将路由器固定在机架中。

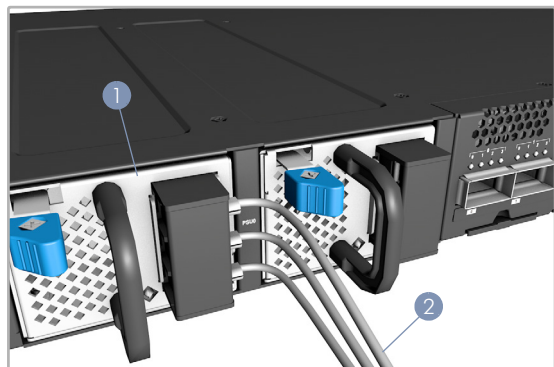
3 将路由器机接地



1. 确保机架已正确接地并符合 ETSI ETS 300 253 规范。确认到机架上接地点的电力连接良好（未经过油漆或绝缘表面处理）。
2. 将接地线（#6 AWG）连接到路由器后面板上的接地点。然后将的另一端连接到机架接地端。

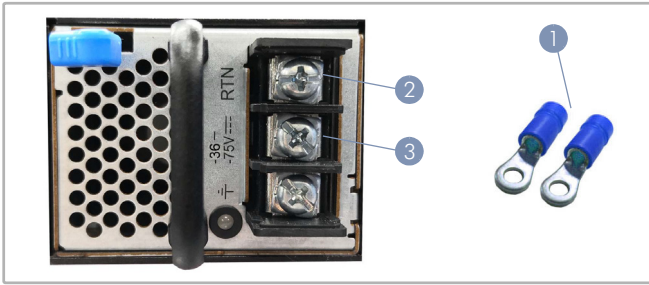
! 小心：必须在所有电源连接都断开的情况下才能移除接地连接。

4 连接电源



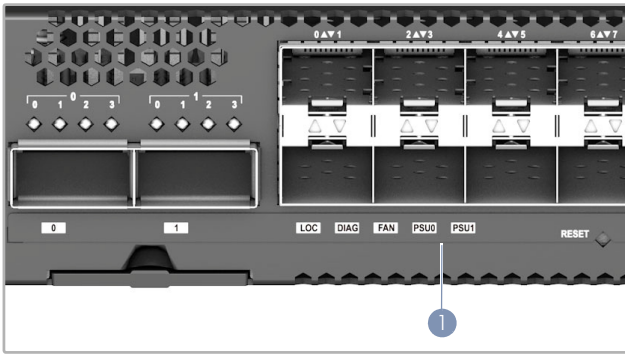
1. 将一个或两个 AC 或 DC PSU 安装在路由器中。此路由器最多支持 2 个 PSU，并且它们的气流方向必须与所安装的风扇架相符。
2. 将外部 AC 或 DC 电源连接到 PSU。

! 小心：使用 UL/IEC/EN 60950-1 认证电源连接到 DC 转换器，使用 #14 AWG（对于 -36 VDC 到 -72 VDC PSU）线连接到 DC PSU。



1. 使用直流电源装置附带的直流环形接地片。
2. 连接直流回线。
3. 连接 36 – 72 VDC 线。

5 检查路由器运行



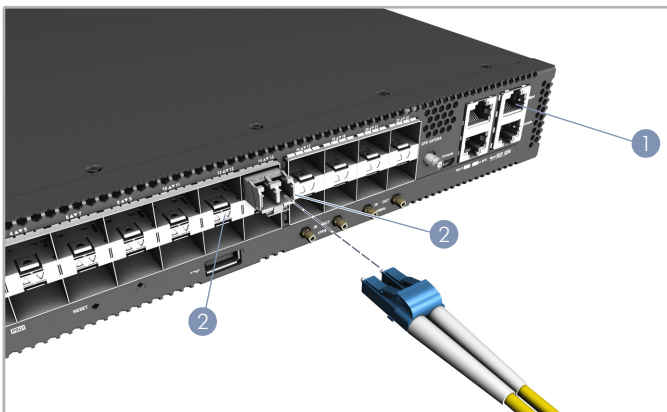
1. 通过系统 LED 检查路由器的基本运行。
若运行正常，PSU0/PSU1、Diag 和 Fan 等 LED 都应显示绿色。

6 执行初次系统启动

1. 如果网络操作系统 (NOS) 安装程序位于网络服务器中，应首先使用 100 欧姆的 5、5e 类或以上双绞线将 RJ-45 管理 (Mgmt) 端口连接到网络。（NOS 安装程序位于相连的存储装置中时不需要。）
2. 启动路由器。等待 ONIE 软件找到和执行 NOS 安装程序，然后等待安装程序加载 NOS 软件映像。
以后路由器启动时将跳过 ONIE 而直接运行 NOS 软件。

i 注意：请参考网络操作系统 (NOS) 安装程序和 NOS 文档以详细了解软件选项和如何设置 ONIE。

7 连接网线



1. 对于 RJ-45 管理端口，连接 100 欧姆 5、5e 类或以上的双绞线。

2. 将 DAC 线连接到 SFP28/QSFP28 插槽。或者先将 SFP28/QSFP28 收发器安装到插槽，然后将光缆连接到收发器端口。
3. 建立连接后，检查端口状态 LED，确保连接正常。

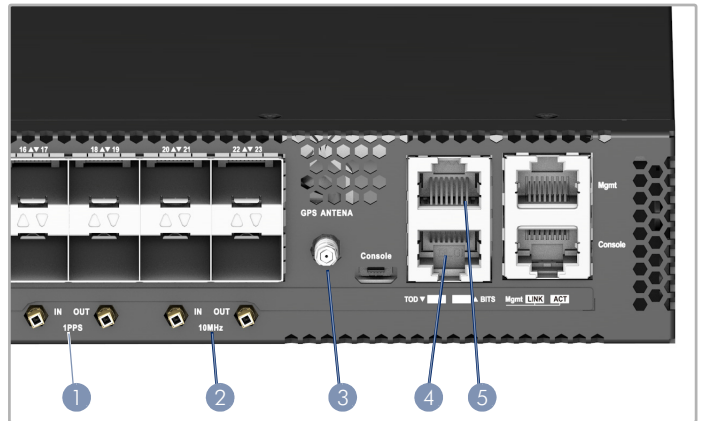
对于 SFP28 端口：

- 绿色 — 25 Gbps 模式
- 琥珀色 — 10Gbps 模式

每个 QSFP28 端口有四个 LED，在以下模式中指示正常连接：

- 1 LED 绿色 — 100 Gbps 模式
- 1 LED 蓝色 — 40 Gbps 模式
- 1-4 LED 琥珀色 — 25 Gbps 突破模式（四通道）
- 1-4 LED 紫色 — 10 Gbps 突破模式（四通道）

8 连接定时端口和 GPS 天线



1. 使用同轴电缆将每秒 1 脉冲（1PPS）输入 / 输出端口连接到其他同步设备。
2. 使用同轴电缆将每秒 10 MHz / 输出端口连接到其他同步设备。
3. 将外部 GPS 天线连接到 GPS 天线端口，以便实现与 GPS 时间的时钟同步。
4. 使用屏蔽线缆将当天时间（ToD）端口连接到使用 ToD 同步信号的其他设备。
5. 使用屏蔽电缆将大楼综合定时供给（BITS）端口连接到使用 BITS 同步信号的其他设备。

硬件规格

交换机机箱

尺寸 (WxDxH)	438.4 x 299.8 x 43.25 mm (17.26 x 11.8 x 1.7 英寸)
重量	6.15 kg (13.56 lb), 安装有两个 PSU
温度	工作时: 0° C 到 45° C (32° F 到 113° F) 存放时: -40° C 到 70° C (-40° F 到 158° F)
湿度	工作时: 5% 到 95% (无冷凝)
功耗	最大 265 W

交流 PSU

电源额定值	100–240 VAC, 50-60 Hz, 400 W
交流输入	100–240 VAC, 50-60 Hz, 6–3 A

48 VDC PSU

电源额定值	48 VDC, 400 W
直流输入	-36 V – -72 V, 14–7 A

管制符合性

辐射	EN 55032:2015+AC:2016, Class A EN 61000-3-2:2014, Class A EN 61000-3-3:2013 FCC Class A VCCI Class A
抗干扰性	EN 55024:2010+A1:2015 IEC 61000-4-2/3/4/5/6/8/11
安全	UL (CSA 22.2 No 60950-1 & UL60950-1) CB (IEC/EN60950-1) CCC
