

Quick Start Guide

Cell Site Gateway

AS7515-24X



www.edge-core.com

Package Contents



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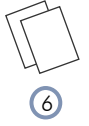
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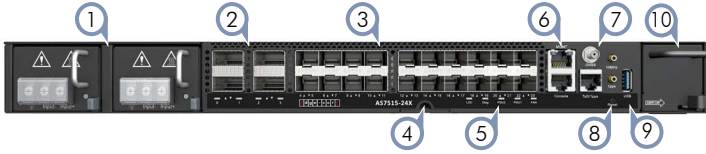


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1. AS7515-24X (includes 2 PSUs and 1 fan tray)
2. Rack Mounting Kit—2 brackets and 8 screws
3. Grounding kit—grounding lug, 2 screws, and 2 washers

4. Ring lugs (x4) (included with DC PSUs only)
5. (Optional) AC power cord
6. Documentation—*Quick Start Guide* (this document) and *Safety and Regulatory Information*

Overview

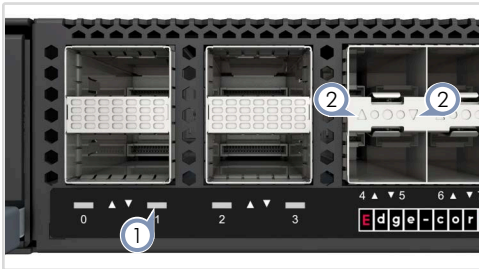


1. 2 x DC or AC PSUs
2. 4 x 100G QSFP28 ports
3. 20 x 25G SFP28 ports
4. Product tag
5. System LEDs
6. Management ports: 1000BASE-T RJ-45, RJ-45 console



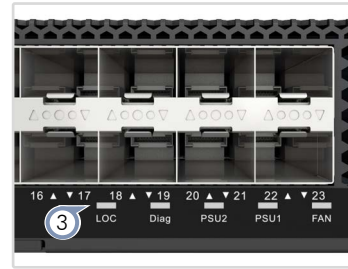
7. Timing ports: GNSS, ToD/1PPS RJ-45, 10MHz, 1PPS
8. Reset button
9. USB storage port
10. Fan tray
11. Grounding screw

Status LEDs

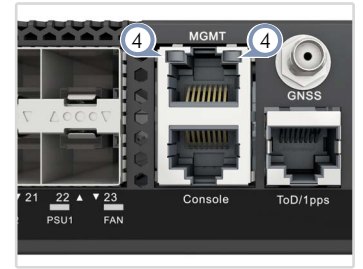


1. **QSFP28 Port LEDs:**
Green — 100G
Cyan — 50G
Magenta — 40G
Blue — 25G
Yellow — 10G

2. **SFP28 Port LEDs:**
Blue — 25G
Green — 10G
Cyan — 1G



3. **System LEDs:**
LOC — Blinking Blue (device locator)
DIAG — Green (OK), Orange (fault detected)
PSU1/2 — Green (OK), Amber (fault)
FAN — Green (OK), Orange (fault)



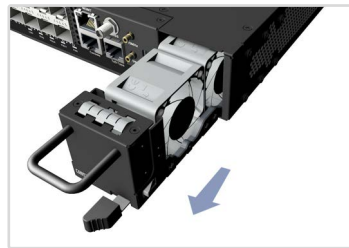
4. **RJ-45 Management Port LEDs:** Left (link), Right (activity)

FRU Replacement



PSU Replacement

1. Remove the power cord.
2. Press the release latch and remove the PSU.
3. Install replacement PSU.



Fan Tray Replacement

1. Press the fan tray's release latch.
2. Pull out to remove the tray.
3. Install replacement tray with matching airflow direction.



* 1 5 0 2 0 0 0 2 7 8 6 A R 0 1 *

Installation



Warning: For a safe and reliable installation, use only the accessories and screws provided with the device. Use of other accessories and screws could result in damage to the unit. Any damages incurred by using unapproved accessories are not covered by the warranty.

Avertissement: Pour une installation sûre et fiable, utilisez uniquement les accessoires et les vis fournies avec l'appareil. L'utilisation d'autres accessoires et vis pourrait endommager l'appareil. Les dommages causés par l'utilisation d'accessoires non approuvés ne sont pas couverts par la garantie.



Caution: The device must be installed in a restricted-access location.

Attention: le périphérique doit être installé dans un emplacement à accès restreint.

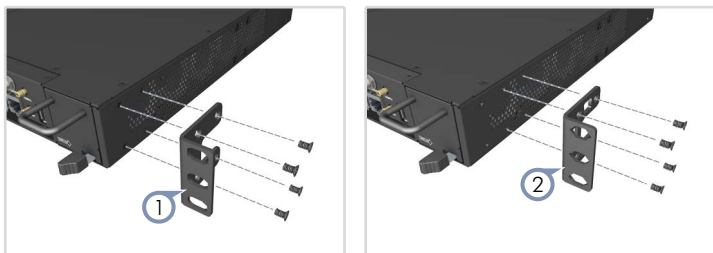


Note: The device has the Open Network Install Environment (ONIE) software installer preloaded, but no software image. Information about compatible software can be found at www.edge-core.com.

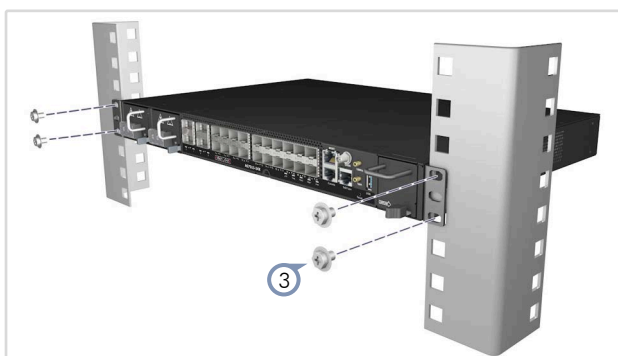


Note: The drawings in this document are for illustration only and may not match your particular model.

1 Mount the Device in an EIA-310 Rack

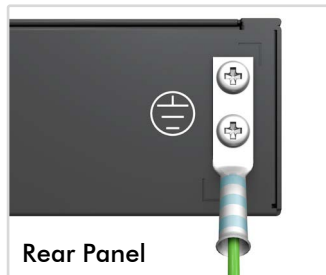


- For 300mm-deep rack: Using the four front screw holes, attach each of the brackets to the device with four of the included bracket screws.
- For 280mm-deep rack: Using the four recessed screw holes, attach each of the brackets to the device with four of the included bracket screws.

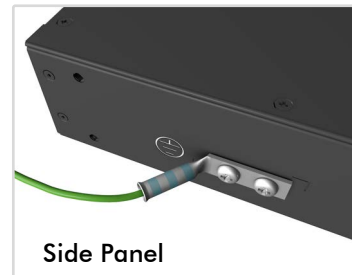


- Use the screws and cage/clip nuts supplied with the rack to secure the device in the rack.

2 Ground the Device



Rear Panel



Side Panel

Verify Rack Ground

Ensure the rack is properly grounded and in compliance with international and local standards. Verify that there is a good electrical connection to the grounding point on the rack (no paint or isolating surface treatment).

Attach Grounding Wire

Attach the grounding wire (#6 AWG/16 mm²) to the grounding point on the device's rear panel or side panel. Then connect the other end of the wire to rack ground.

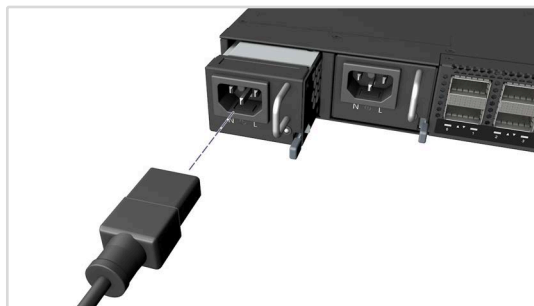


Caution: The earth connection must not be removed unless all supply connections have been disconnected.

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

3 Connect Power

a. AC Power



Install one or two AC PSUs in the device, if they are not already installed in the factory. Then connect an external AC power source to the PSUs.

b. DC Power



Install one or two DC PSUs (part number CRXT-T0T12B only) in the device, if they are not already installed in the factory.

Connect an external DC power source to the PSUs. Or, connect to a no-tolerance DC mains supply with a UL/CSA-approved circuit breaker rated at 16 A.

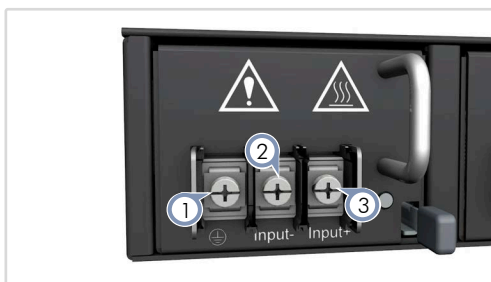
Caution: Before connecting power supply cables to the device, ensure that power to the feed lines is turned off at the supply circuit breaker or disconnected from the power bus.
Attention: Avant de connecter les câbles d'alimentation à l'appareil, assurez-vous que l'alimentation des lignes d'alimentation est coupée au niveau du disjoncteur d'alimentation ou déconnectée du bus d'alimentation.

Caution: Use a UL/IEC/EN 60950-1 and/or 62368-1 certified power supply to connect to a DC converter, and a #14 AWG/1.5 mm² (for 36 VDC to 72 VDC PSU) wire to connect to a DC PSU.

Attention: Utilisez une alimentation certifiée UL/IEC/EN 60950-1 et/ou 62368-1 pour le connecter à un convertisseur CC et un câble AWG #14/1.5 mm² (pour 36 VDC à 72 VDC) pour vous connecter à une alimentation CC.

Caution: All DC power connections should be performed by a qualified professional.

Attention: Toutes les connexions d'alimentation CC doivent être effectuées par un professionnel qualifié.

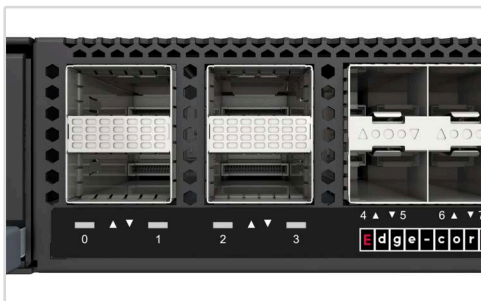


1. Connect the ground wire / protective earth.
2. Connect the 36 – 72 VDC wire.
3. Connect the DC return wire.

i Note: It is suggested to use the following for DC power:
 One UL 1015 AWG#10-14 stranded wire, 2m maximum (36VDC-72VDC: Input+)
 One UL 1015 AWG#10-14 stranded wire, 2m maximum (VDC return: Input-)
 One UL 1015 AWG#10-14 stranded wire, 2m maximum, (green/yellow) green with yellow stripe (PE)

i Note: The DC terminal screws should be tightened to a torque of 7 in-lbs maximum.

4 Make Network Connections



QSFP28/SFP28 Ports

Install transceivers and then connect fiber optic cabling to the transceiver ports. Alternatively, connect AOC/DAC cables directly to the QSFP28/SFP28 slots.

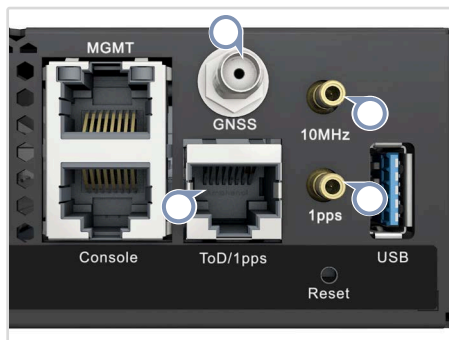
The following transceivers are supported in the QSFP28 ports:

- 100GBASE-SR4
- 100GBASE-LR4
- 100GBASE-ER4

The following transceivers are supported in the SFP28 ports:

- 25GBASE-SR
- 25GBASE-LR
- 10GBASE-SR
- 10GBASE-LR
- 10GBASE-ER
- 10GBASE-ZR

5 Connect Timing Ports



GNSS Antenna

Attach an external antenna to the GNSS antenna port for clock synchronization with GPS time.

RJ-45 ToD/1pps

Use a Cat. 5e or better twisted-pair cable to connect the 1-pulse-per-second (1pps) and Time of Day (ToD) port to other synchronized devices.

10MHz/1pps

Use coax cables to connect the 10 MHz and 1-pulse-per-second (1pps) ports to other synchronized devices.

6 Make Management Connections



MGMT RJ-45 Port

Connect Category 5, 5e or better twisted-pair cable.

RJ-45 Console Port

Use the included RJ-45-to-DB-9 null-modem console cable to connect to a PC running terminal emulator software. Use a USB-to-male DB-9 adapter cable (not included) for connections to PCs that do not have a DB-9 serial port.

Configure the serial connection: 115200 bps, 8 characters, no parity, one stop bit, 8 data bits, and no flow control.

Console cable pinouts and wiring:

Device's RJ-45 Console	Null Modem	PC's 9-Pin DTE Port
6 RXD (receive data)	<-----	3 TXD (transmit data)
3 TXD (transmit data)	----->	2 RXD (receive data)
4,5 SGND (signal ground)	-----	5 SGND (signal ground)

Hardware Specifications

Size (WxDxH)	438.4 x 300 x 43.7 mm (17.26 x 11.81 x 1.72 in.)
Weight	5.42 kg (11.95 lb), with two installed PSUs
Temperature	Operating: -40° C to 65° C (-40° F to 149° F) Transportation: -40° C to 70° C (-40° F to 158° F) Storage: -40° C to 70° C (-40° F to 158° F)
Humidity	Operating: 5% to 95% (non-condensing)
System Input Rating	100–240 VAC, 50/60 Hz, 3.0–1.3 A 36 – 72 VDC, 8.4–4.2 A

Regulatory Compliances

Emissions	EN 55032, Class A EN 61000-3-2, Class A EN 61000-3-3 EN 300 386 EN 303413 ETSI EN 301489-1 ETSI EN 301489-19 FCC Title 47, Part 15, Subpart B, Class A VCCI-CISPR 32, Class A
Immunity	EN 55035 EN 55024 IEC 61000-4-2/3/4/5/6/8/11
Environmental	Storage: ■ ETSI EN 300 019-1-1 Class 1.1 ■ Temperature: -40° C to 70° C (-40° F to 158° F) Transportation: ■ ETSI EN 300 019-1-2 Class 2.3 ■ Temperature: -40° C to 70° C (-40° F to 158° F) Operating Conditions: ■ ETSI EN 300 019-1-3 Class 3.2 ■ Temperature: -40° C to 65° C (-40° F to 149° F) ■ Relative Humidity: 5% to 95%
Safety	UL (CSA 22.2 No 62368-1 & UL 62368-1) CB (IEC/EN 62368-1)
