

ALLIANCE provides a flexible system architecture where a mixture of edgeROU, N2ROU, MROU, HROU, and MPROU remotes may be connected to a common iBIU headend to solve any coverage requirement.

The edgeROU remotes require the edgeHUB for power and optical connection to the headend.

The Expansion Power Supply Unit (EPSU) is used to power edgeROUs that cannot be powered directly by the edgeHUB.

The EPSU features:

- Provides power to edgeROUs that cannot be powered directly from the edgeHUB
- Modular design can provide 8, 16, or 24 output power ports. Each port can provide power to 2 edgeROUs.
- All connectors on front panel for easy access
- Rack mounted, fan cooled
- IP 20 rating

Expansion Power Supply Unit (EPSU) Topology

The edgeHUB provides optical signaling for 32 and power for 16 edgeROUs. The optional EPSU is used to power edgeROUs that cannot be powered by the edgeHUB.

The EPSU can hold one to three power supply modules (HOPSUs). Each HOPSU has eight power ports. Each port can provide power to one edgeROU or, by splitting the power lead, two edgeROUs. Splitting the lead from each port allows each HOPSU to provide power for up to 16 edgeROUs and a fully-configured EPSU (three HOPSUs) to power 48 edgeROUs.

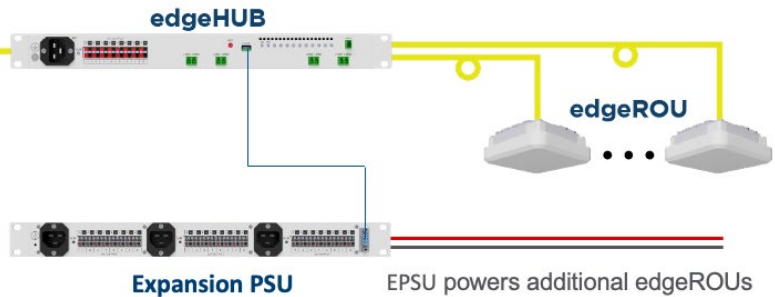
DMS1200 System Management



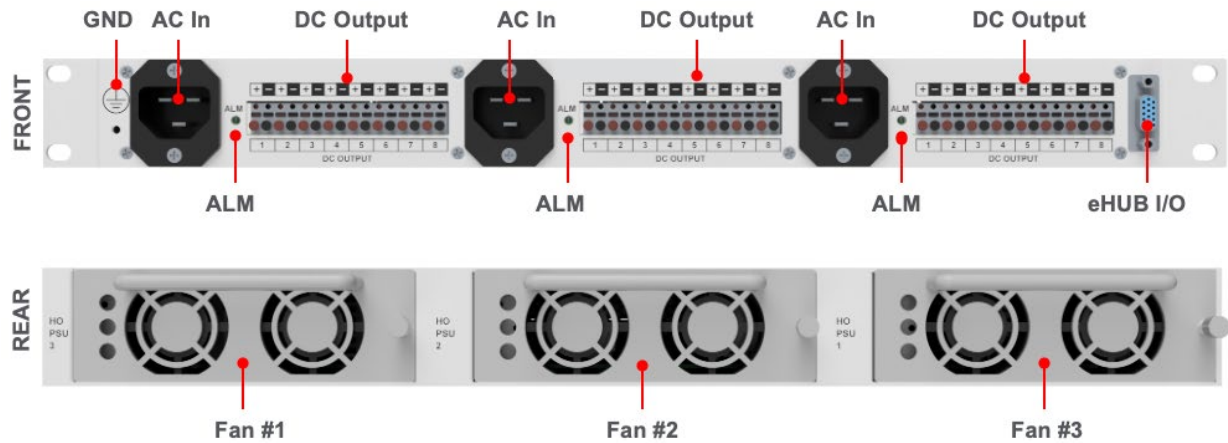
iODU Optical Interface



iBIU Signal Interface



EPSU Components



EPSU Front Panel	Description
GND	Ground terminal
AC IN	Power supply port (IEC320/C20) – 1 per HOPSU
ALM LEDs for DC Output Status	Green: DC output is normal; Red: DC output is abnormal; Off: No power
DC Outputs	Terminal block ports for supplying DC 57 V to edgeROUs
edgeHUB I/O	Port for communication via I2C protocol with edgeHUB (D-SUB / USB-C). The EPSU provides current monitoring, current limiting and port on / off functions for each port. It also communicates status and alarms back to the headend
EPSU Rear Panel	Description
Fan Units	Each HOPSU features and rear fan unit

EPSU Specifications

Item	Specification
Size (WxHxD)	19" x 1.75" (1U) x 14.7" / 482.6mm x 44.45mm (1U) x 374mm
Weight	15 lbs / 6.79 kg
Power Consumption	909W per HOPSU (EPSU can hold up to three HOPSU. Each edgeROU connected to the HOPSU will draw 35W.)
Power Input (AC only)	AC 90V ~ 264V
Normal Noise, dBA	65
Operating Temperature / Humidity	23 to 113F (-5 to 45C) / 5 to 90%
Cooling	Fan forced. Two fans per HOPSU
Mounting	Standard 19" rack. 1U height
Ingress Protection	IP 20
EMC	FCC Part 15 Class B, CISPR Class B
Safety	NRTL Certified, UL 62368-1

Parts List

Part Number	Expansion Power Supply Unit (EPSU)
EPSU_SUBRACK	Expansion PSU Subrack Supports 3 HOPSU which must be ordered separately from the EPSU chassis.
HOPSU_AC	PSU module for EPSU (also spare for edgeHUB), AC Input
HOPSU_BLK	EPSU Blank Module. Must be used in empty HOPSU slots.

Additional information is available in the following documents, available from [SOLiD Support](#).

See Also:

SOLiD Data Sheet - ALLIANCE edgeROU version 7191725-682335

SOLiD Data Sheet - ALLIANCE edgeROU version 17192325-67835

SOLiD Data Sheet - ALLIANCE edgeROU Version 781719

SOLiD Data Sheet – ALLIANCE edgeHUB

ALLIANCE DAS - edgeHub-edgeROU Operations & Install Guide



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