

**ALLIANCE provides a flexible system architecture where any ALLIANCE remote unit can be connected to a common iBIU headend to solve any coverage requirement.**

**The edgeROU is the smallest, highest power, and lowest cost fiber-to-the-edge active DAS remote available.**

**The edgeROUs require the edgeHUB for power and optical connection to the headend.**

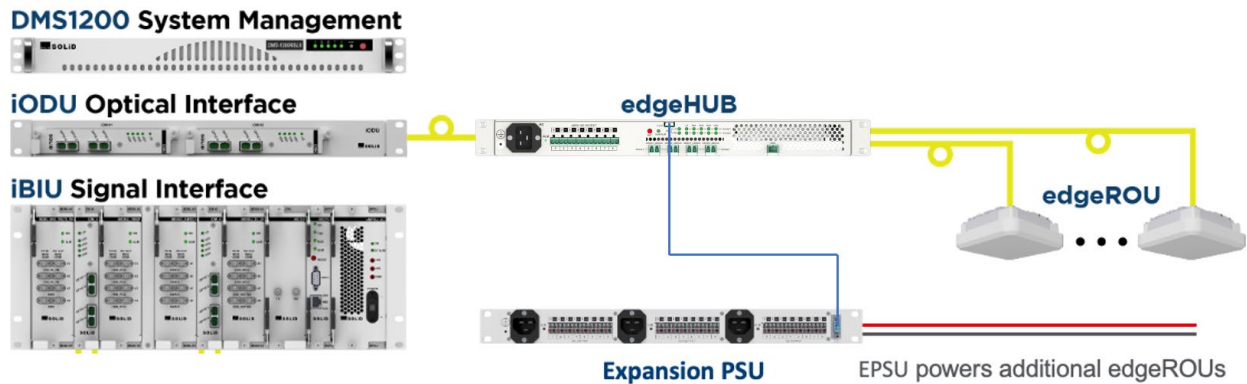
The edgeHUB R2 features:

- Optical signaling for up to 32 edgeROU remotes
- Integrated power supply provides power for up to 16 remotes
- Expansion power supply available for powering for edgeROUs #'s 17-32
- Wideband 136 – 3800 MHz

**System Architecture**

Each edgeHUB provides an optical connection for up to 32 edgeROUs and power for up to 16 edgeROUs. The optional EPSU powers edgeROUs that cannot be powered from the edgeHUBs.

SOLiD currently offers the edgeHUB in two versions. The edgeHUB R2 (described in this data sheet) will support all edgeROUs except C-Band. The edgeHUB WDM version is required to support C-Band.



**edgeHUB R2 Specifications**

edgeHUB R2 RF Characteristics	
Operating Frequency Band	TX / RX: 136 – 3800 MHz

edgeHUB R2 Optical Characteristics	
Optical Wavelength	TX: 1310nm, RX: 1550nm
Fiber Optic Cable: iOM to edgeHUB	1 SC-APC
Fiber Optic Cable: edgeHUB to edgeROU	1 per edgeROU up to 8 LC-APC
Link Budget: From iOM to edgeHUB	5 dBo for 4-port iOM; 10 dBo for 1-port iOM
Link Budget: From edgeHUB to edgeROU	5 dBo without optical coupler; 1 dBo when using optical coupler

edgeHUB R2 Power Supply	
Input Voltage	90 to 280 VAC
Output Voltage	57 VDC
Power Consumption	55 watts, typical (excluding power for remotes) Each remote (up to 16) will require an additional 35W each

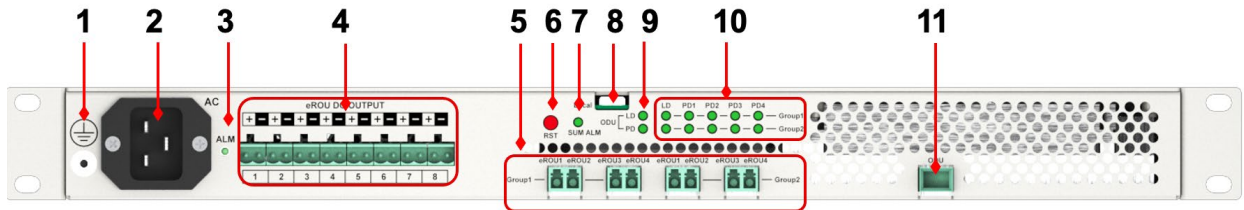
Power Cabling Max Length to each edgeROU (AWG #14~18 copper wire recommended)		
Each power port from the edgeHUB or Expansion Power Supply (EPSU) can provide power for one edgeROU or, by splitting the power lead, two edgeROUs.	1 edgeROU	2 edgeROUs (each)
	AWG 14: 1,000m	AWG 14: 300m
	AWG 16: 600m	AWG 16: 200m
	AWG 18: 400m	AWG 18: 100m

edgeHUB R2 Standards Compliance	
EN 62368-1, FCC Part 15, Class A, WEEE	
This equipment uses a Class 1 LASER according to FDA/CDRH Rules. This product conforms to all applicable standards of 21 CFR Chapter 1, Subchapter J, Part 1040.	

edgeHUB R2 Physical Characteristics	
Physical Size (WxHxD)	482.6 x 44.45 (1RU) x 450 mm (19" x 1RU x 17.7")
Weight	7.5 kg (16.5 lbs.)
Sealing Class	IP20
Mounting	Standard 19" rack
Operating Temp / Humidity	-5 to +45 °C (+23 to +113 °F) / Up to 90%, non-condensing
Cooling	Forced air, front to back

edgeHUB R2 Physical Interfaces	
Power Input	IEC C19
Power to Remotes	Terminal block, 14AWG to 18AWG
Optical, to/from Headend	One SC-APC, simplex, single mode
Optical, to/from Remotes	Eight LC-APC, simplex, single mode
Management / EPSU	USB-C

**edgeHUB R2 Components**



Front Panel (R2 version)	Description
1. Ground Lug	Ground connection
2. AC Power Connector	Port for input power supply, IEC C19
3. Alarm LED	Power alarm
4. DC Output Ports	Connectors for DC output to power the edgeROUs
5. Optical Ports	Optical ports for transmitting optical signals to four edgeROUs, LC-APC
6. Reset Button	Resets unit
7. SUM Alarm	edgeHUB summary alarm
8. Local Management Port	Port for local management and connection to EPSU, USB-C
9. LD, PD Alarm for iODU	LD, PD alarm indicators monitoring connection to iOMs in iODUs
10. LD, PD Alarm for eROU	LD, PD alarm indicators monitoring connection to edgeROUs
11. Input Port	Optical connection to the headend iOM, SC-APC



Rear Panel (R2 Version)	Description
1. Fan Unit	Two chassis fans
2. Power Supply Unit	Two fans for power supply unit

**Ordering Information**

edgeHUB R2 and EPSU Equipment	Description
eHUB_SR_AC_R2	Hub Subrack, PSU Included, AC, Delay module optional Supports extended PCS and AWS bands for band 70
eHUB_SR_DC_R2	Hub Subrack, PSU Included, DC, Delay module optional
EPSU_SUBRACK	Expansion PSU Subrack, supports 3 HOPSU (ordered separately)
HOPSU_AC	PSU module for EPSU (also spare for edgeHUB), AC Input
HOPSU_BLK	EPSU Blank Module

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

*SOLiD Data Sheet - ALLIANCE edgeROU version 17192325-67835*

*SOLiD Data Sheet - ALLIANCE edgeROU version 7191725-682335*

*SOLiD Data Sheet - ALLIANCE edgeROU version 781719*

*SOLiD Data Sheet - ALLIANCE edgeHUB WDM version*

*SOLiD Data Sheet - ALLIANCE Expansion Power Supply Unit (EPSU)*

*ALLIANCE DAS - edgeHub-edgeROU Operations & Install Guide*



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