

**C-Band MIMO Version**

**ALLIANCE provides a flexible system architecture where any ALLIANCE remote can operate in the same system.**

**A mixture of edgeROU, N2ROU, MROU, HROU, and MPROU remotes can be connected to a common iBIU headend to solve any coverage requirement.**

**The edgeHUB only supports edgeROU remotes and edgeROU remotes can only be connected to the edgeHUB.**

The C-Band edgeROU features:

- Main unit supporting C-Band MIMO (3700MHz-3980MHz)
- Addon units covering either SISO 7/8/17/19 or Auction 110 MIMO (3450-3550 MHz)
- All bands supported over a single fiber
- Integrated and external antenna options
- Compact size
- Flexible mounting options

## System Architecture

Flexible Architecture: the ALLIANCE headend supports all remote types.

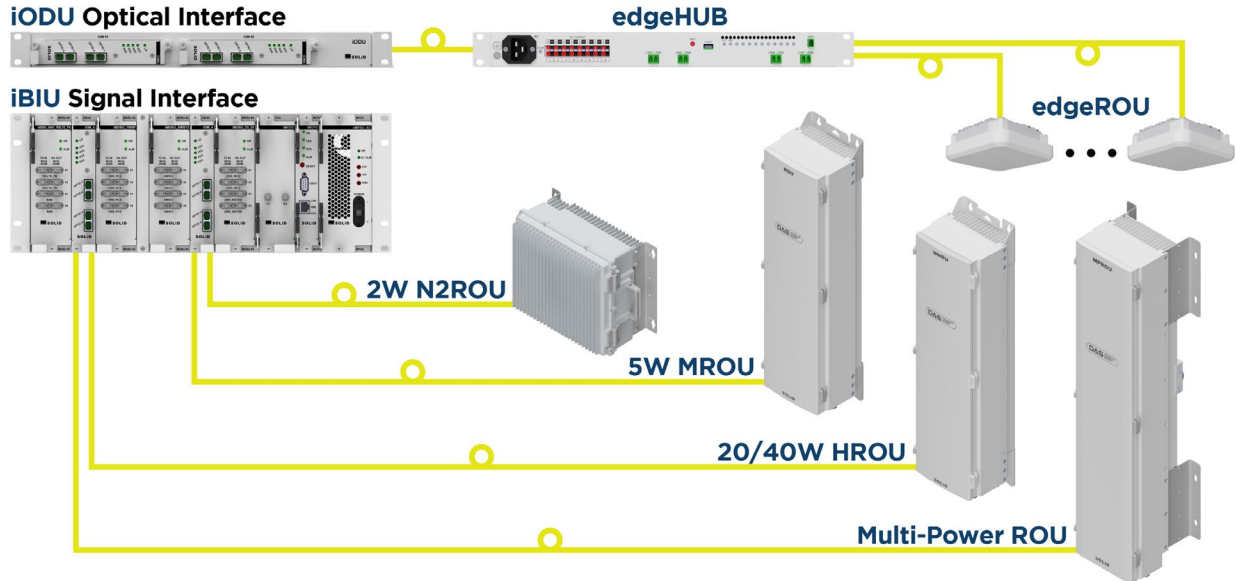
### DMS1200 System Management



### iODU Optical Interface

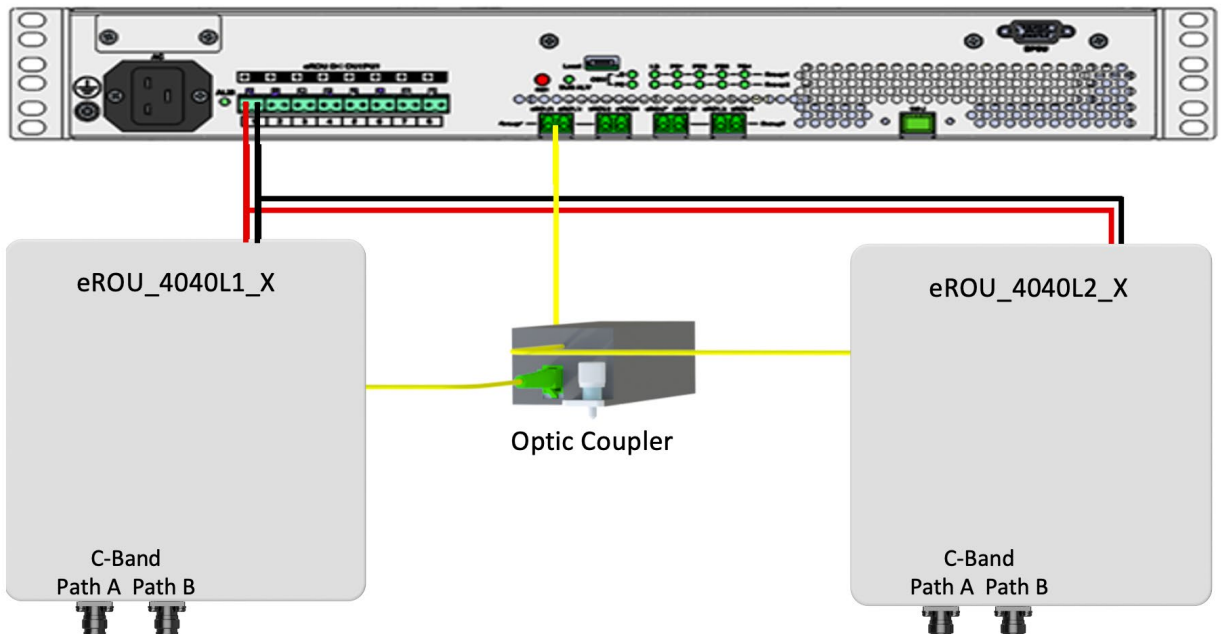


### iBIU Signal Interface

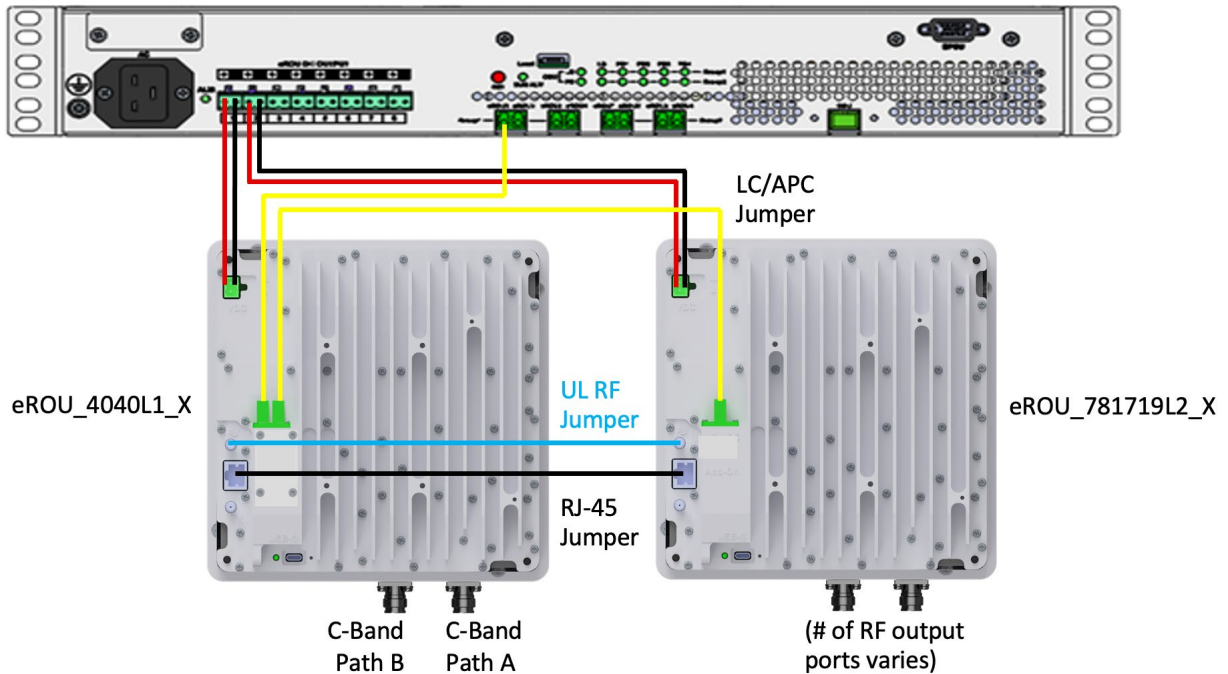


## Flexible Deployments

The eROU\_4040 main unit and eROUa\_3434 add-on can be deployed together as a standalone network. For increasing band coverage, the eROU\_4040 main unit can also be cascaded with a second eROU\_4040 unit. Cascading two main units requires mixing the Lambda versions (i.e., pair L1 with L2 or L2 with L1) and using the optic coupler (eROU\_CASCADE\_KIT) to split the optical feed from the eHUB. Each eROU\_4040 main unit can also accept an eROUa\_3434 add-on.

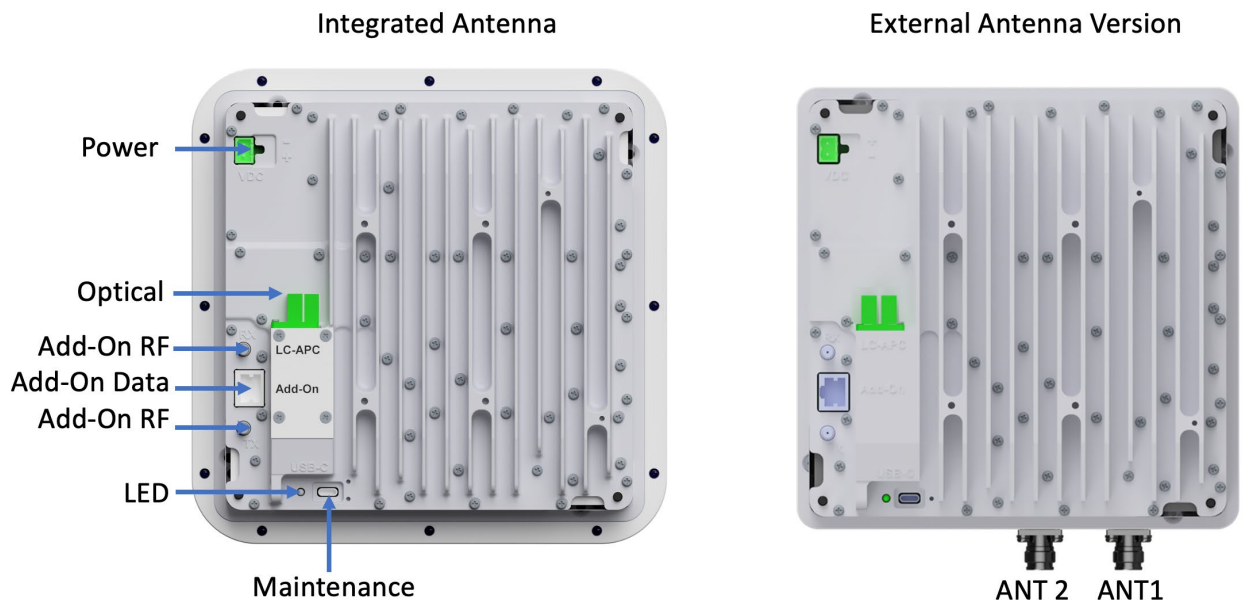


The eROU\_4040 main unit can also be paired with the eROU\_781719 main unit. When pairing these units, mix the Lambda versions. For example, pair eROU\_4040L2 with eROU\_781719L1 or pair eROU\_4040L1 with eROU\_781719L2. The eROUa\_3434 addon cannot be used if the eROU\_4040 is being used as an addon to eROU\_781719.



The eROU\_4040 main unit and eROUa\_3434 addon are offered with internal or external antennas. To support these units requires the WDM edgeHUB (eHUB\_SR\_WDM\_AC) and the corresponding iMDBUs in the headend that support these bands.

**edgeROU Components**



edgeROU	Notes
Power IN	Terminal_Block_CONN_2P (TLPS-302V-02P-G)
Optical Port	Optical connection to edgeHUB, LC/APC
Add on RF	RF connection to edgeROU Add-on, 2 QMA-type female
Add on Data	Data connection to edgeROU Add-on, RJ45
Maintenance Port	For connection to management PC, USB-C
LED Indicator	Status indicator: Green: normal operation. Red: summary alarm
Antenna Ports (External Antenna version only)	Two 2.2-5 type female

## edgeROU Specifications

Frequency Bands, MHz		
Band	Frequency	Maximum Occupied Bandwidth
C-Band	3700 - 3980	280
Auction110	3450 - 3550	100

edgeROU RF Characteristics (C-Band only)	
Output Power (External Antenna Versions)	24 dBm (Path A C-Band) 24 dBm (Path B C-Band)
EIRP (Internal Antenna Versions)	28.5 dBm (Path A C-Band) 28.5 dBm (Path B C-Band)
Input Power	≤ -50 dBm
Uplink IIP3	-25.5 dBm
ALC Range	25 dB
Noise Figure	<8.5 dB, max.
Error Vector Magnitude	< 3.5% for 256 QAM
VSWR	< 1.8:1

System RF Characteristics	
System Gain (excluding POI)	TX: 44 dB per band RX: 27 dB (TDD)
Gain Control Range Step: 0.5 dB	TX: 30 dB iMDBU; 25 dB edgeROU RX: 30 dB iMDBU; 25 dB edgeROU

edgeROU Optical Characteristics	
Optical Wavelength	TX: 1310nm, RX: 1550nm
Number of Optical Fibers	One (WDM), LC-APC
Optical Link Budget: edgeHUB to edgeROU	5 dBo without optical coupler; 1 dBo with optical coupler

edgeROU Power Supply		
Voltage	39 to 57 VDC	
Power Consumption	35 watts, max	
Cable Distance (Typical)	1 edgeROU	2 edgeROUs
	AWG 14: 1,000m	AWG 14: 300m
	AWG 16: 600m	AWG 16: 200m
	AWG 18: 400m	AWG 18: 100m

edgeROU Physical Characteristics	
Size (WxHxD)	Internal antenna: 220 x 220 x 90mm (8.7 x 8.7 x 3.5 in)
	External antenna: 200 x 200 x 73 mm (7.9 x 7.9 x 2.9 in)
Weight	Internal antenna: 2.6 kg, 5.7 lbs.
	External antenna: 3.0 kg, 6.6 lbs.
Sealing Class	IP50
Mounting	Wall or ceiling (recessed or above)
Operating Temperature	-5 to +50 °C, +23 to +122 °F
Operating Humidity	5% to 90%, non-condensing
Cooling	Convection

edgeROU Physical Interfaces			
External Antenna	Two 2.2-5, female		
External Antenna Ports	eROU_4040_X (Applies to both L1 and L2)	Port 1	Path A
		Port 2	Path B
Power	Two pin header		
Optical	Two LC-APC, simplex, single mode (1330nm)		
Management	USB-C		
Add On edgeROU	Two QMA female, one RJ45		

edgeROU Standards Compliance	
<ul style="list-style-type: none"> <li>• UL 62368-1</li> <li>• FCC CFR 47 PART 15 Subpart B Class A</li> <li>• FCC CFR 47 Part 2, Part 27</li> <li>• UL2043 Plenum</li> <li>• WEEE</li> </ul>	<p>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.</p>

**Ordering Information**

Remote Units	edgeROU Description
eROU_4040L1_N	eROU, Main, C-Band MIMO, Internal Antenna, Lambda 1
eROU_4040L2_N	eROU, Main, C-Band MIMO, Internal Antenna, Lambda 2
eROU_4040L1_X	eROU, Main, C-Band MIMO, External Antenna, Lambda 1, 2.2-5
eROU_4040L2_X	eROU, Main, C-Band MIMO, External Antenna, Lambda 2, 2.2-5
eROUa_3434_X	eROU, Addon, 3450-3550MHz MIMO, External Antenna, Lambda 2, 2.2-5
eROUa_3434_N	eROU, Addon, 3450-3550MHz MIMO, Internal Antenna, Lambda 2

Hub Equipment	
eHUB_SR_WDM_AC *	edgeHUB Subrack, PSU included, AC, WDM (for Auction 110/C-Band), Delay Module (option)
* This version of edgeHUB is required when using C-Band edgeROUs.	

Accessories	
eROU_WALL_BKT	edgeROU Wall Mount Bracket
eROU_CEILING_BKT	edgeROU Drop Ceiling Mount Bracket
eROU_PSU_KIT	edgeROU External PSU, 2m Cable, Adapter
eROU_CASCADE_KIT	Optical Coupler, edgeROU Cascade



**SOLiD Gear, Inc.**  
 800 Klein Road, Suite 200  
 Plano, TX 75074  
 PHONE: 888.409.9997  
 EMAIL: [sales@solid.com](mailto:sales@solid.com)  
 WEB: [www.solid.com](http://www.solid.com)

