Figure 3-23   ADXV-R-PSU Front and Rear View

- Spec
    - Size: 2.3 x 13.8 x 6.8 (in)
    - Weight: 7.5lbs for DC PSU

3.2.6.1   Port

- RU1-RU5 ports connect respectively to RU's rear port.
- ORU port connects to ORU(ORU-X).
- BATTERY port connects to optional battery box.
- ALARM port connects to 'PSU ALARM' port of ORU
- AC IN 110V port connects to AC 110V

3.2.6.2   LED

LED	LED color	Status
ALARM	Green	Normal
	Yellow	Link fail
SERVICE	Green	Normal
	Yellow	Soft fail
	Red	Hard fail

3.2.6.3   AC Switch

The ADXV-RU is operated at 110 AC.
(WARNING: The AC switch must be set to OFF before cable connection to avoid equipment damage and personal injury.)
(WARNING: To avoid damage, be sure 110V AC for operation of ADXV-RU.)
(CAUTION: DOUBLE POLE/NEUTRAL FUSING.)

The procedure for connecting RU
- AC S/W OFF

▪ AC cable connection
▪ Optic connection
▪ RF cable connection
▪ AC S/W ON

Figure 3-24   ADXV-R-PSU Front and Rear View

3.3 Remote Unit (RU) for N4X

- N4X is for PS78 and VU
- N4X RU is composed of an ORU, a PSU and an RM(PS78 or VU)

- Specifications
  - Size: 9.85 x 15 x 6.6 (in)
 - Weight: 26.5lbs
  - Power Input: 110VAC
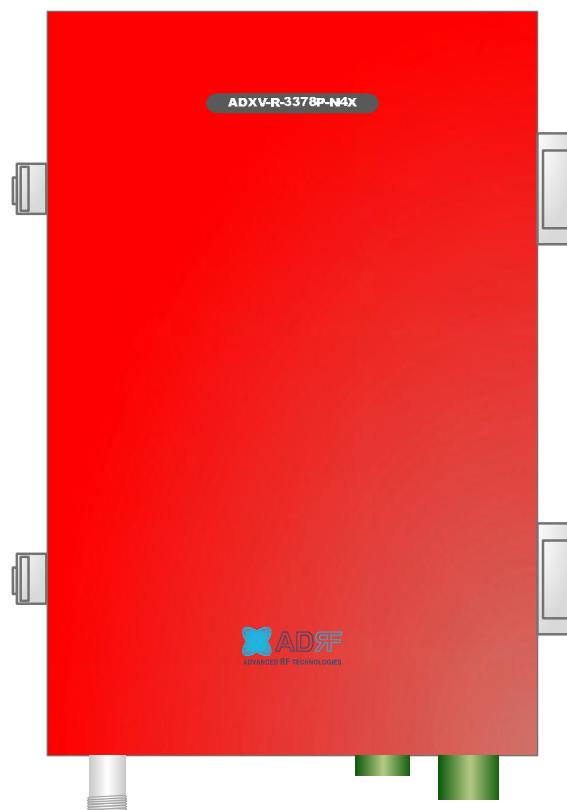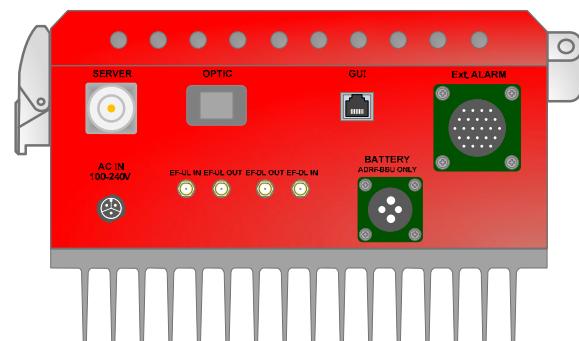
**Figure 3-25   ADXV-R-3378P-N4X Front and Bottom View**
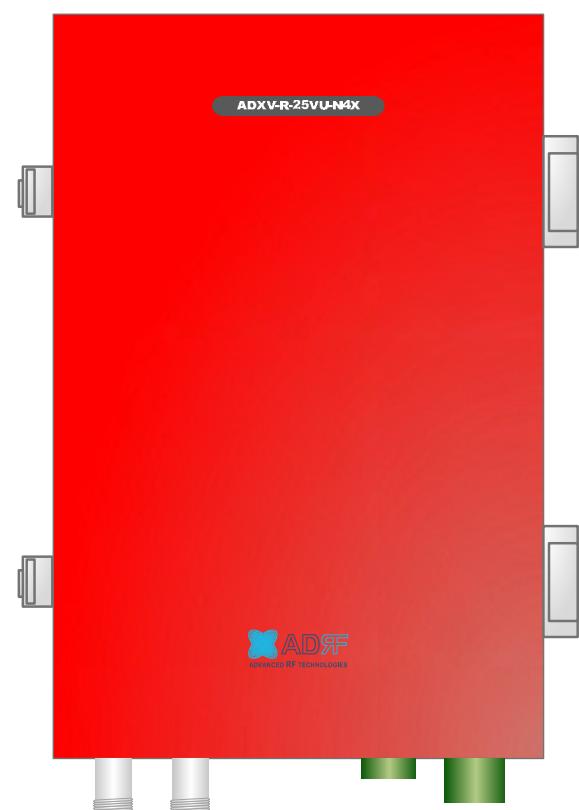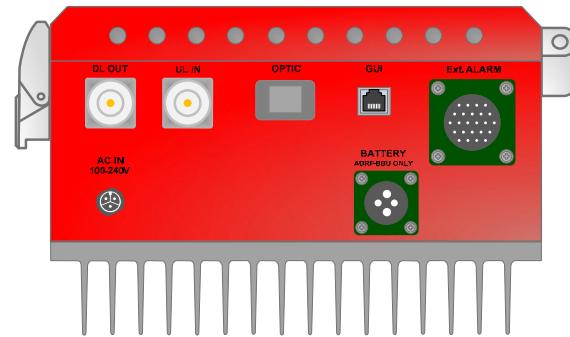
Figure 3-26   ADXV-R-25VU-N4X Front and Bottom View

3.3.1   Port

- 78PS: SERVER, OPTIC, GUI, AC IN, BATTERY, EXTERNAL ALARM, EF-UL IN, EF-UL OUT, EF-DL OUT, EF-DL IN
- VU: DL OUT, UL IN, OPTIC, GUI, BATTERY, AC IN, EXTERNAL ALARM

4. CABLE CONNECTION

4.1 Head End Connection Diagrams
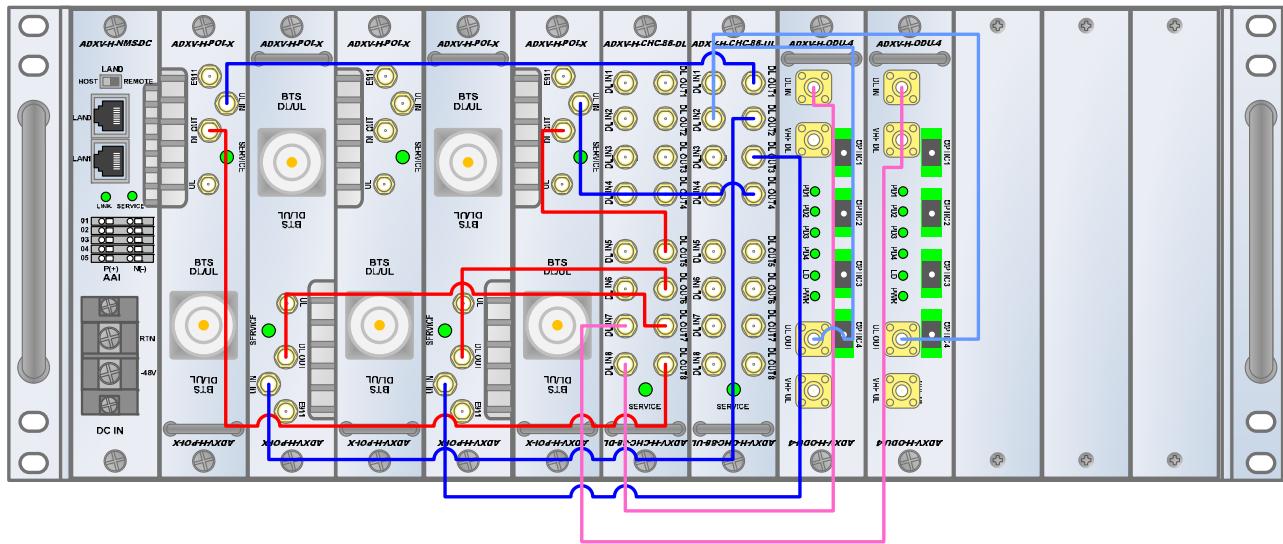
Figure 4-1   HE Cable connection (4 ADXV-H-POIs, 2 ADXV-H-ODUs)

4.2 Remote Unit Connection Diagrams
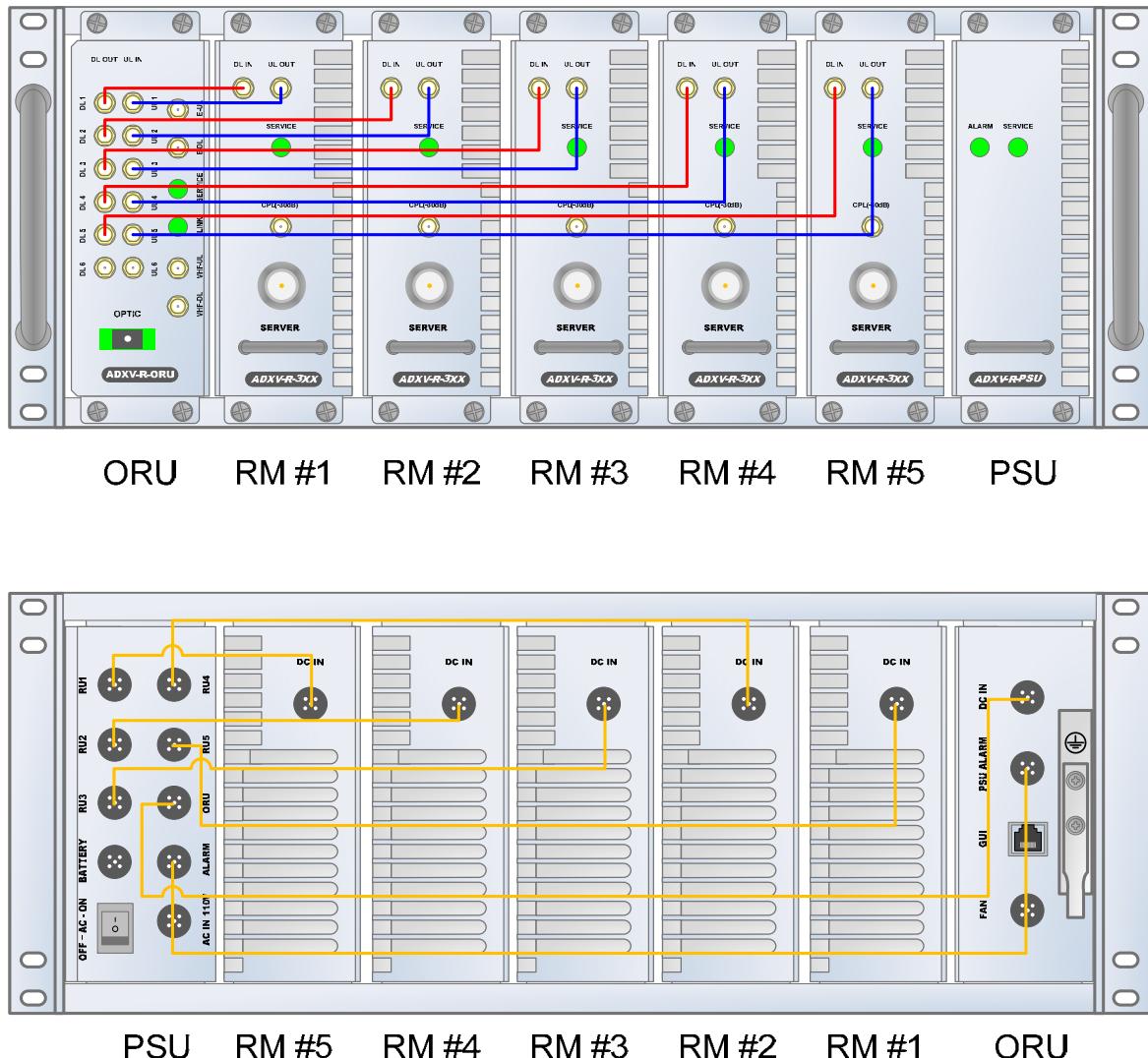
Figure 4-2   ADXV-RU 5ands connection

5. MOUNTING METHOD

5.1 Head End

5.1.1 Rack Mount
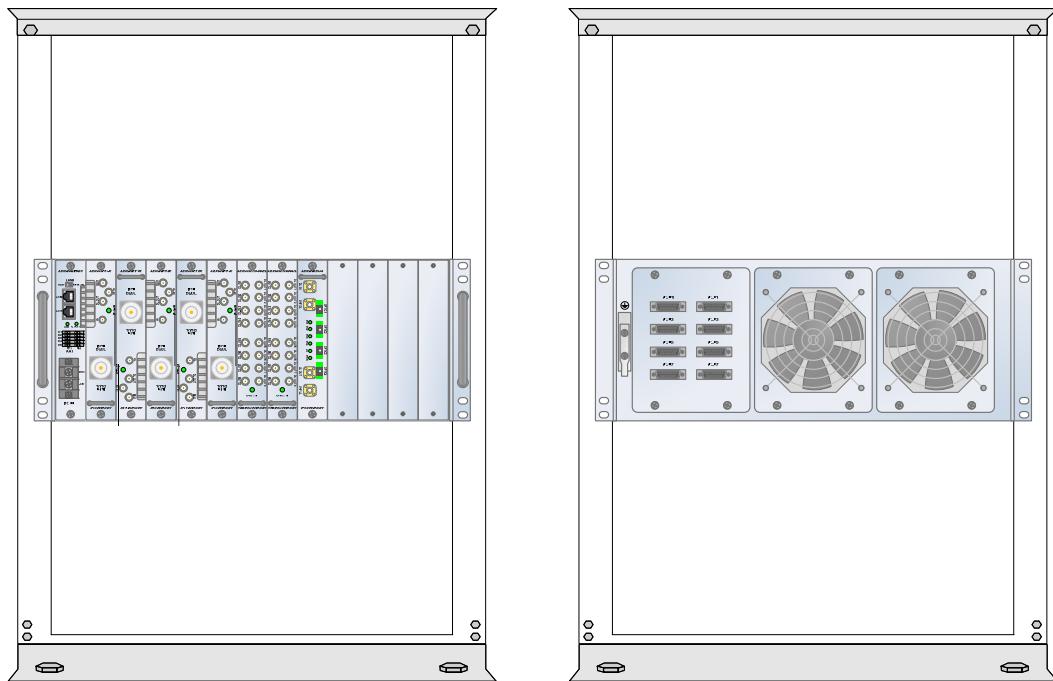
Figure 5-1   HE Rack Mount (Front & Rear view)

5.2 RU

5.2.1 Rack Mount
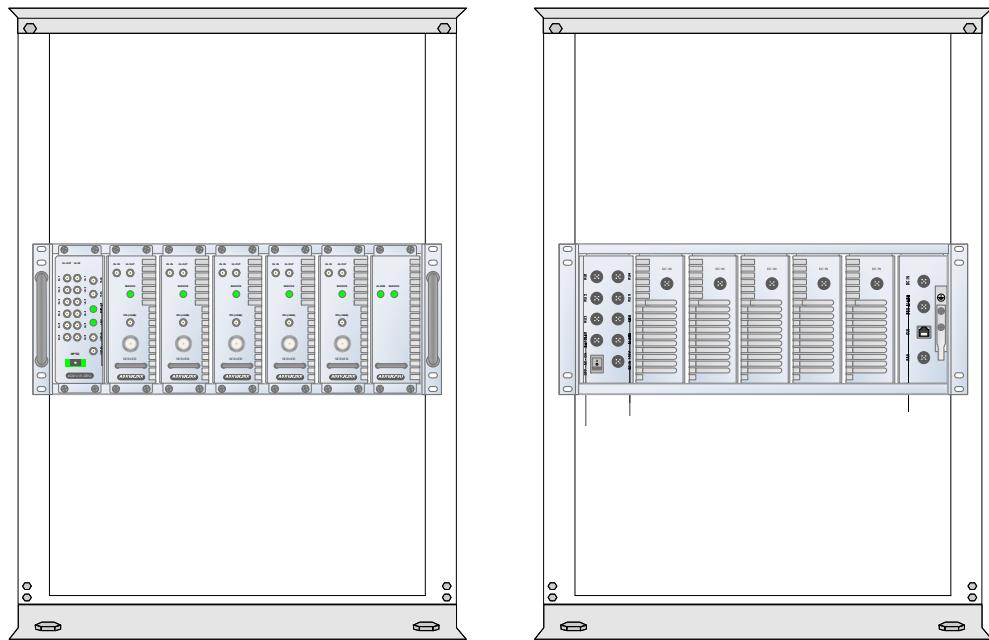
Figure 5-2   RU Rack Mount Front and Rear View

6.   INSTALLATION

6.1 Pre-Installation Inspection

Please follow these procedures before installing ADXV RU equipment:

- o Verify the number of packages received against the packing list.
- o Check all packages for external damage; report any external damage to the shipping carrier. If there is damage, a shipping agent should be present before you unpack and inspect the contents because damage caused during transit is the responsibility of the shipping agent.
- o Open and check each package against the packing list. If any items are missing, contact ADRF customer service.
- o If damage is discovered at the time of installation, contact the shipping agent.
- o Verify the AC voltage with DVM (Volt meter) is 110V AC. Incorrect AC voltage can damage the ADXV equipment.
- o This power of this system shall be supplied through wiring installed in a normal building. If powered directly from the mains distribution system, it shall be used additional protection, such as overvoltage protection device.
- o Over voltage category(OVC) & Pollution degree(PD)

Over voltage category (OVC)	OVC II

Pollution degree (PD)	PD2

6.2 ADXV DAS Installation Procedure

6.2.1 HE Installation Procedure

> ⚠️ **CAUTION:** ADXV DAS HE should be installed inside building only.

6.2.1.1 Installing a ADXV DAS HE in a rack

The ADXV HE chassis mounts in a standard 19" (483mm) equipment rack. Allow clearance of 3" (76mm) at the front and rear, and 2" (51mm) on both sides for air circulation. No top or bottom clearance is required.

- Consideration:
  - Eight mounting holes are located on 4 corners of ADXV HE to attach it to the 19" rack. The ADXV HE must be securely attached to a rack that can support the weight of the ADX.
- Mount procedure
  - The following steps should be followed while mounting the ADXV HE
  - > Verify that the HE and Mounting holes are in good condition
  - > Set the ADXV DAS HE against the 19"rack and secure the unit with screws
  - > Verify that ADXV HE is securely attached
  - > Connect the GND cable
  - > Connect the RF cable
 - > Connect the Power
  - > Connect the Optic cable
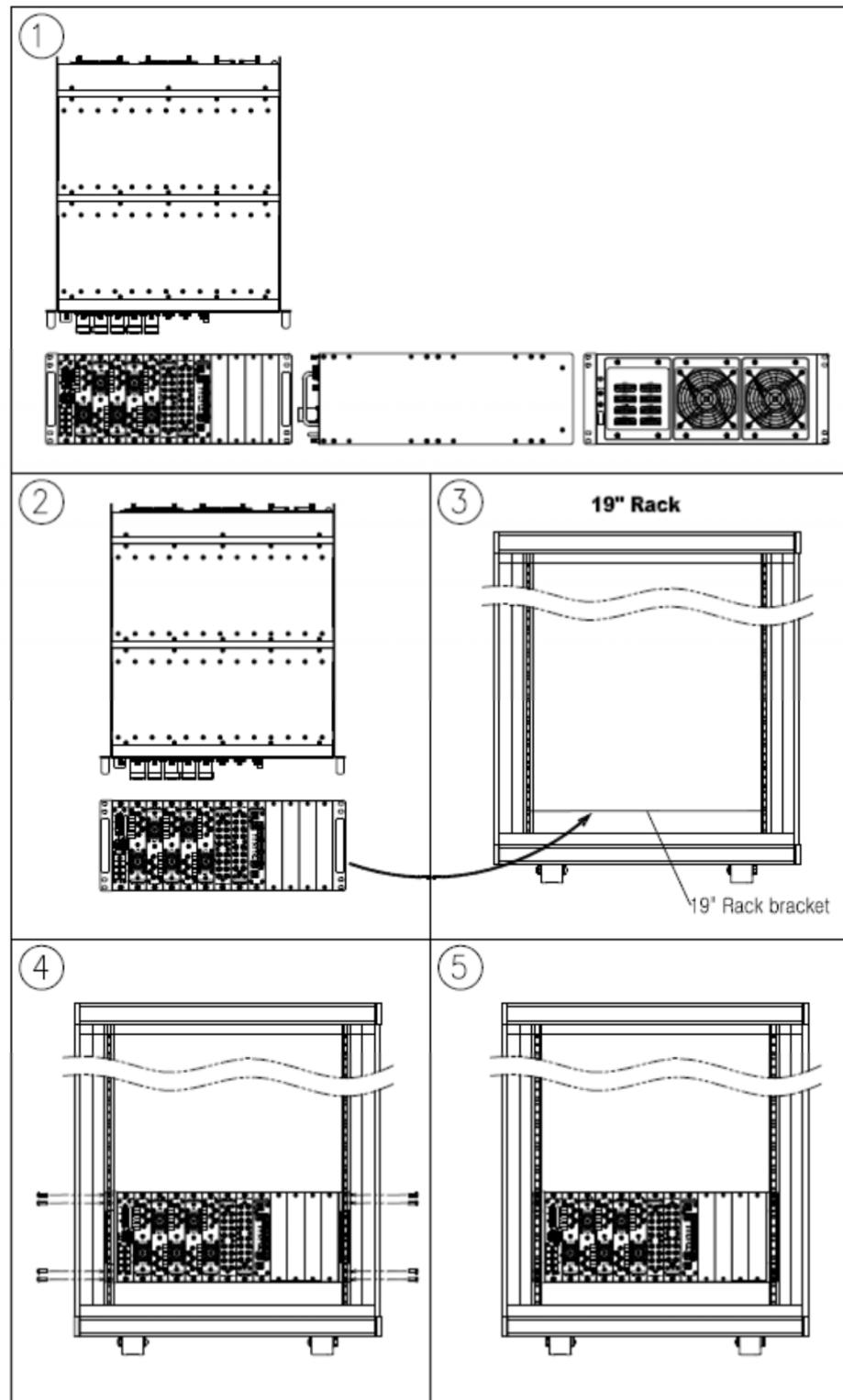
Figure 6-1   HE Installation Procedure

6.2.2   RU Installation Procedure

The ADXV RU chassis mounts in a standard 19" (483mm) equipment rack. Allow clearance of 3" (76mm) at the front and rear, and 2" (51mm) on both sides for air circulation. No top or bottom clearance is required.

- Consideration:
    - Eight mounting holes are located on 4 corners of ADXV RU to attach it to the 19" rack. The ADXV RU must be securely attached to a rack that can support the weight of the ADX.

- Procedure
    - The following steps should be followed while mounting the ADXV RU
    > Verify that the RU and Mounting holes are in good condition
    > Set the ADXV DAS RU against the 19"rack and secure the unit with screws
    > Verify that ADXV RU is securely attached
    > Connect the GND cable
    > Connect the RF coaxial cable
   > Connect the Power
    > Connect the Optic cable
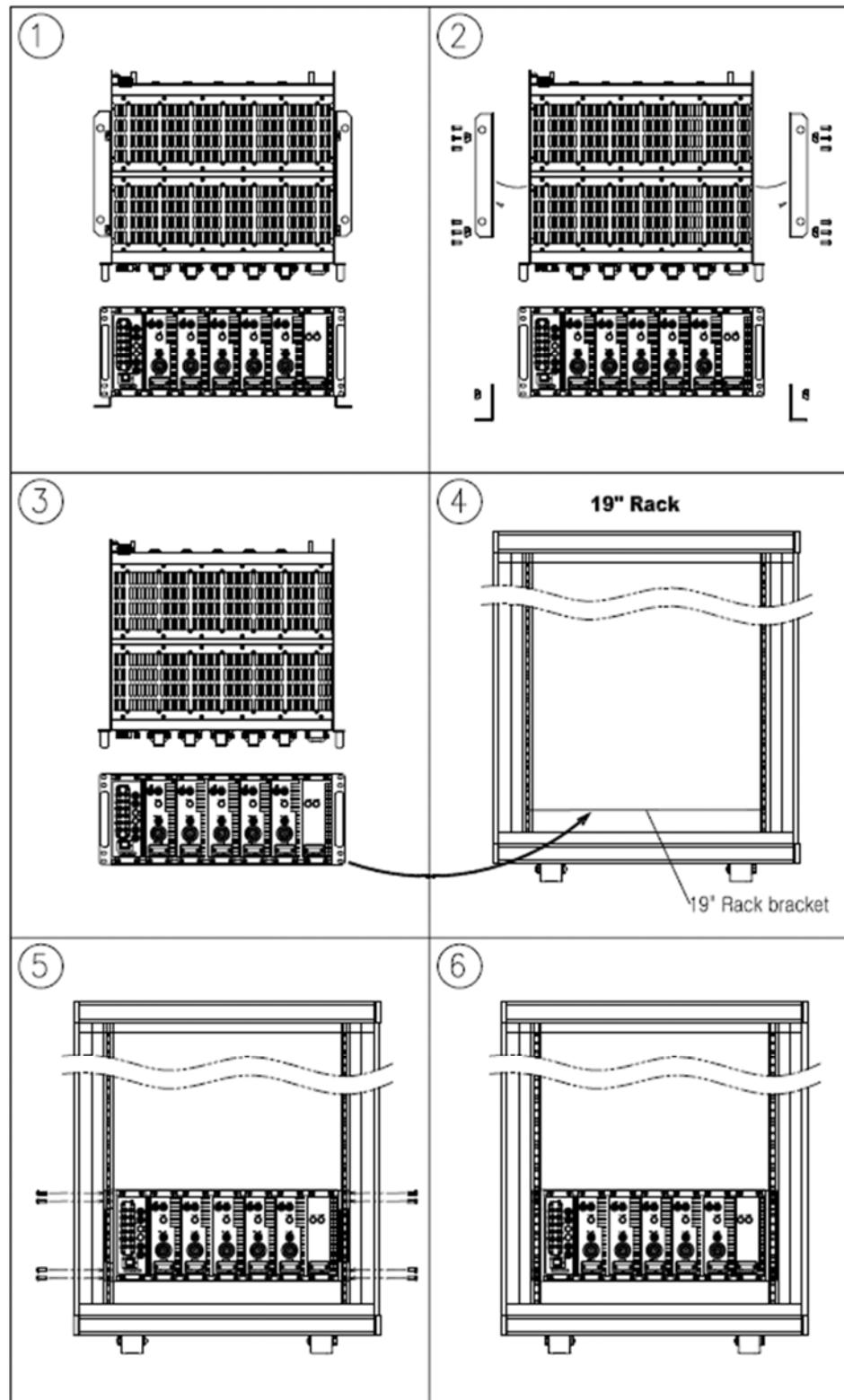
Figure 6-2   RU Installation Procedure

6.2.3 RF coaxial cable and antenna connection

> The coaxial cables which are connected to antenna port of RU. Before connection, check the VSWR value of coaxial cable whether it is within specification using Sitemaster..
> At this time, check if the Return loss have above 15dB or VSWR have below 1.5
> The part of antenna connection fasten to port not to be loosed and not to be injected the dusty and insects
> The antenna connected to RU is only serviced in in-building

6.3 Grounding

A ground cable is included in the box. The grounding terminals are located at the rear of the ADXV HE and RU. The grounding cable should be properly connected before powering on the equipment.
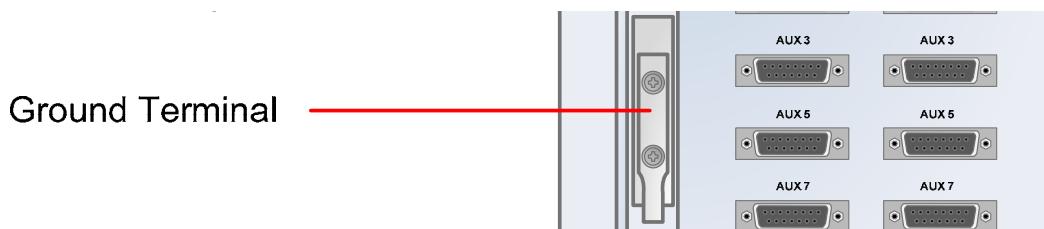
Figure 6-3   HE Ground Cable Connection, Protective Earthing Conductor (HE chassis rear side)
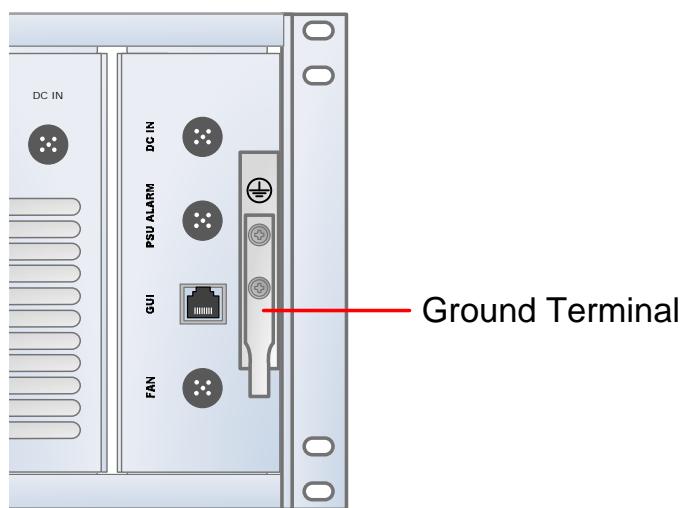

Figure 6-4   RU Ground Cable Connection, Protective Earthing Conductor (RU chassis rear side)

Round terminals located on the side of a 1.25mm²(16AWG)or more wires Using permanently connected to earth(Protective earthing conductor).

6.4 Optic Port Cleaning

- We recommend cleaning optic connector using a dry optical cleaning swab or tissue in a dry environment as needed. We recommend cleaning the optic connectors only if the expected optic loss is higher than the loss reported in the Web-GUI by 1.5dBo. (Figure 6-5)

- When optic connector are not in use, the port should be covered with a protective dust cap. (Figure 6-6)


**Figure 6-5   Optic Connector Cleaning (left) and Optic Port Cleaning (right)**
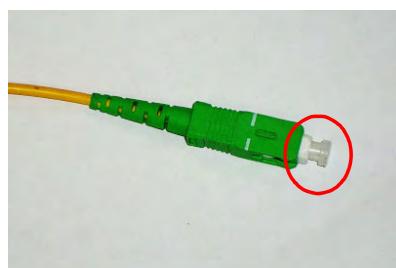
Figure 6-6   SC/APC Optic Connector Dust Cap

7. WEB-GUI

7.1 Web-GUI Setup

The Web-GUI allows the user to communicate with the DAS system either locally or remotely. To connect to the DAS system locally, you will need a laptop with an Ethernet port and a RJ-45 crossover cable. To connect to the DAS system remotely, you will need to have an active internet connection and the ADXV system must have and external modem box connected to the ADX.

7.1.1   DAS system/PC Connection Using Web-GUI

- Verify that your Local Area Connection is set to Obtain an IP address automatically under the Internet Protocol (TCP/IP) properties
    - If you are connecting to the unit remotely (use of a modem), then skip this and next step.
- Connect the RJ-45 crossover cable between the laptop's Ethernet port and the repeater's Ethernet port
- Launch an Internet Browser
- Type the following IP address into the address bar of Microsoft Internet Explorer: http://192.168.63.1
    - If you are connecting to the unit remotely, then type the IP address of the modem to connect to the unit
- The following login screen will appear:

Figure 7-1   Login screen

If you are not the Administrator, please type in your assigned username & password which you should have received from the Administrator.

Table 7-1   Account Information for Login

Account type	Show items	Control Items	Default ID	Default Password
Administrator	all Items	all items	admin	admin
User	restricted items	restricted items	adrf	adrf
Guest	restricted items	read-only	guest	guest
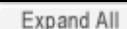
7.2 Administrator/User Mode

7.2.1 Common

7.2.1.1 Navigation Tree

The navigation tree located on the left hand side of the Web-GUI allows the user to switch between the various modules that are connected to the system.

Table 7-2   Navigation tree

Parameters	Description
Expand All	Expands the entire navigation tree
Collapse All	Collapses the entire navigation tree
+	The module has the expandable subordinate modules
−	The branch is currently expanded
(orange)	The module has soft fail alarm
(red)	The module has hard fail alarm
(green)	The module has no alarms (normal)
NMS	The selected module will have orange colored text

7.2.1.2 Power Status

Display the power source that is currently being used.

Table 7-3   Power Supply Status

Input Power Status	Display Image
AC	Power
Battery	Battery

7.2.1.3 Commissioning Status

Display whether or not the module has successfully been commissioned.

Table 7-4   Commissioning ICON

Status	Display Image
Commissioned	Commissioned
Not-Commissioned	Not Commissioned

7.2.1.4 Information

Figure 7-2   ADXV DAS General Information

- Information: Displays the serial number, latitude/longitude, firmware version of selected module, and Web GUI version of the NMS.

- Location: Displays the address where the ADXV DAS is installed.

- Description: Displays the description of selected module. The description of each module can be edited from the Install tab. It is recommended to use the location of the module as the description. This description information can be seen when hovering over the device tree in order to easily identify each component.

- Technical Support: Displays ADRF's Technical Support contact information.

- Installer Contact Info: Displays the contact information of the installer.

7.2.2   Status Tab

7.2.2.1   Status – NMS

The NMS Status page provides an overall view of how the system is performing. From the NMS Status page, the user can see what modules are connected to ADXV DAS. In addition, the user can see if any alarms are present in the system and also the commissioning status of each module.

7.2.2.1.1   System Summary

The Summary section provides the user with the number of components physically connected, the number of soft/hard/link fails present in the system, and also the number of commissioned and non-commissioned componnets.

<p align="center">Table 7-5   System Summary Description</p>

Parameters	Description
Connected	Display the number of modules physically connected to ADXV DAS
Soft Fail	Display the number of soft fail present on each module
Hard Fail	Display the number of hard fail present on each module
Link Fail	Display the number of link fail present on each module
Not Commissioned	Display the number of non-commissioned or commission failed module
Commissioned	Display the number of successfully commissioned module

7.2.2.1.2   HE Alarm Status

Display the alarm status of each HE component.

7.2.2.1.3   HE Commissioning Status

Display commissioning status of each HE component.

7.2.2.1.4   Alarm

Displays alarm status of the NMS. If an alarm is present in the system, the color of the system alarm tab will change according to the type of failure.

7.2.2.1.5   SNMP

<p align="center">Figure 7-3   SNMP (Install – NMS)</p>

The SNMP section allows you to specify the Site ID and Manager IP. The Site-ID is the code that is used to identify a particular module. The Manager IP field is where the user inputs the IP address of the NOC system that is being used to monitor the SNMP traps.

7.2.2.1.6   Location

This section allows the user to input the latitude and the longitude of the repeater.
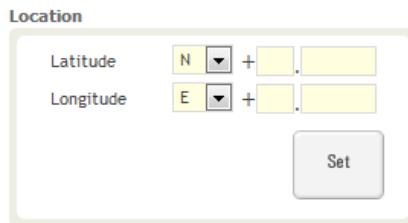
Figure 7-4   Location Setting (Install – NMS)

- Select N or S from the dropdown menu for Latitude
- Select E or W from the dropdown menu for Longitude
- Input the first 3 numbers of the latitude/longitude in the text area after the "+" and before the "."
- Input the last 6 numbers of the latitude/longitude in the text area after the "."

7.2.2.1.7   External Modem Box Settings

This section allows the user to specify an alternative IP, Subnet Mask, and Gateway settings. These settings are enabled when the Host/Remote switch is set to the Remote position.

Figure 7-5   External Modem Box Setting (Install – NMS)

7.2.2.1.8   Description

This section allows the user to save the description of NMS.

Figure 7-6   Description (Install – NMS)

7.2.2.1.9   SNMP Agent False Alarm Test

This section allows the user to generate both soft and hard fail alarms. After alarms are generated, the NOC can poll the ADXV to see if alarms are present. All alarms generated during this test are false alarms.
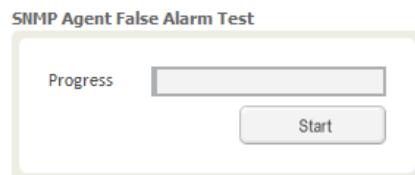
Figure 7-7   SNMP Agent False Alarm Test (Install – NMS)

7.2.2.1.10   Location Info / Installer Info

This section allows the user to specify the address of the repeater and also the information of the installer.

Figure 7-8   Location Info / Installer Info (Install – NMS)

7.2.2.1.11 Date & Time

This section allows the user to specify the current date and time.

Figure 7-9   Date & Time Setting (Install – NMS)

7.2.2.1.12 Description

This section allows the user to save the description of remote module.
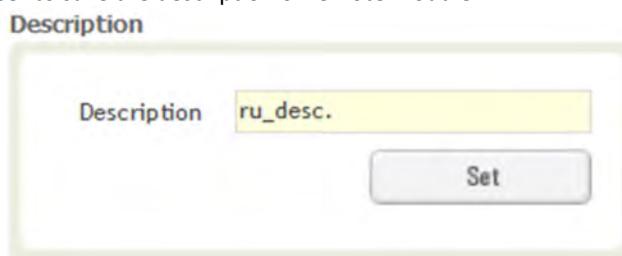
Figure 7-10   Description (Install-Remote Module)

7.2.3   System

The System tab allows the user to perform firmware updates, upload closeout packages, view any changes to the system, backup existing configuration, and add/remove user accounts, and change the login credentials of the Administrator.

7.2.3.1   System: Account

7.2.3.1.1   System: Account - Account Management (Admin Only)

The Account Management section allows the Administrator to delete any user/guest account. Please note that the Account Management section is only available if you are logged into the system as the Administrator. To delete a user/guest account click on the Account Management link and under the Delete column, click on the delete button.
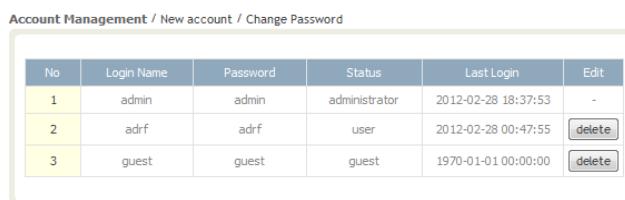
Figure 7-11   Account Management

7.2.3.1.2   System: Account - New Account (Admin Only)

The New account section allows the Administrator to create a new user/guest account. Please note that the new account section is only available if you are logged into the system as the Administrator. To create a new user/guest account click on the new account link and fill in the fields highlighted in yellow as shown below.
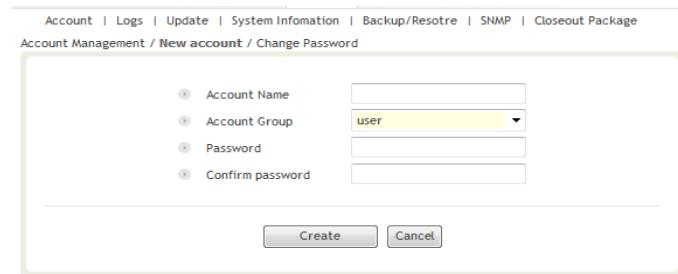
Figure 7-12   New Account

7.2.3.1.3   System: Account - Change Password

The Change Password section allows the current user who is logged into the system to change their login credentials.

Figure 7-13   Change Password

7.2.3.2   System: Logs

7.2.3.2.1   System: Logs - Event Log

This section displays system events that have taken place. The Event Log displays who has made the changes, the time and date of when the event took place, and what changes were made to the system. The System Log tracks the following events:

- System Initiation
- Alarm Set
- Alarm Clear

7.2.3.2.2   System: Logs - User Log

This section tracks user activity within the system. The User Log displays who has made the changes, the time and date of when the event took place, and what changes were made to the system. The User Log tracks the following items:

- Log in / Log out activity
- Changes to gain/attenuation/output values
- System event generated by user(firmware update, backup/resote, create/delete account)
- DAS Navigation Tree Lock/Unlock
- Description change
- Repeater/installer information change
- Setting date/time
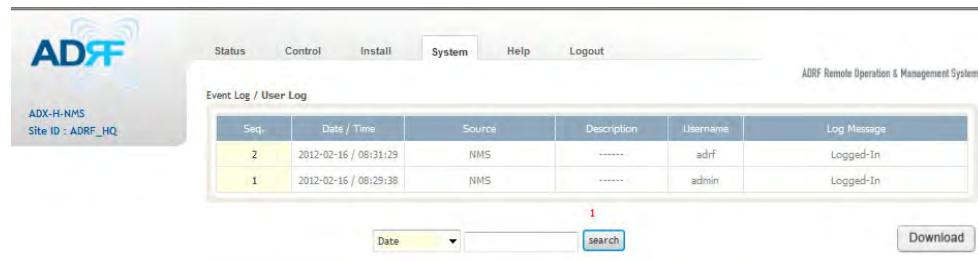
Figure 7-14   User Log

7.2.3.3 System: Update

- To perform a firmware update, click on the System:Update tab and the following screen will show up.
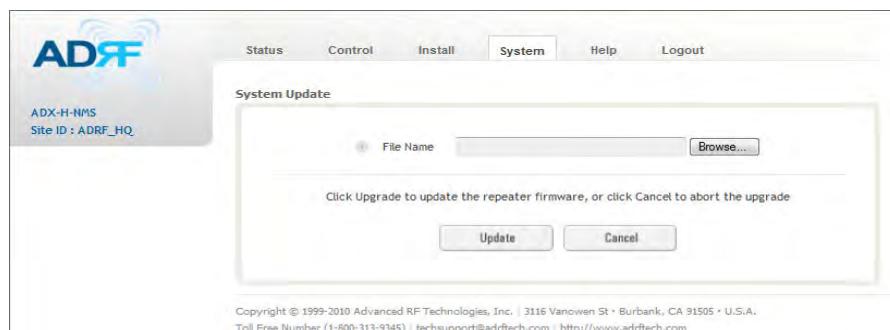
Figure 7-15   System update

- Click on the 'Browse' button and locate the firmware file.
- Click on the Update button to perform the firmware update.
- Once the firmware update is complete, the following message will appear.

Figure 7-16   Message after System update is complete

7.2.4   Help

If an internet connection is available, clicking on the Help Tab will redirect the user to our Technical Support page.

Figure 7-17   Help

7.2.5   Logout

Clicking the Logout button will log the current user off the system.

7.3 Guest Mode

When logging into the system as a guest, the guest will only have read-only privileges and will not be able to make any changes to the system.

8. SYSTEM-WIDE SPECIFICATION

1.1 700MHz/S8C/PS78/PCS/.AWS/BRS/VU Specifications.

Parameters				S8C (CELLUAR & SMR800)	PS78 (PS700 & PS800)	PCS	AWS	WCS	BRS (TDD/FDD)	VU (VHF & UHF)
Frequency (Bandwidth)	Downlink (MHz)	Lower A	728-734	862-894 (32MHz)	PS700(FirstNet + PS 700): 758-768, 769~775 PS800: 851-861	1930-1995 (65MHz)	2110-2180 (70MHz)	2350-2360 (10MHz)	TDD: 2496-2690 (194MHz) FDD: 2620-2690 (70MHz)	VHF: 138-174 (36MHz) UHF: 380-512 (132MHz)
		Lower B	734-740							
		Lower C	740-746							
		Upper C	746-757							
	Uplink (MHz)	Lower A	698-704	817-849 (32MHz)	PS700(FirstNet + PS 700): 788-798, 799~805 PS800: 806-816	1850-1915 (65MHz)	1710-1780 (70MHz)	2305-2315 (10MHz)	TDD: 2496-2690 (194MHz) FDD: 2500-2570 (70MHz)	VHF: 138-174 (36MHz) UHF: 380-512 (132MHz)
		Lower B	704-710							
		Lower C	710-716							
		Upper C	776-787							
Input Power Range (dBm)	POI			+48~0						–
	POIL			+25~-15					–	+25~-15
System Gain/ Nominal pass band gain	Downlink (dB)			POI to RM: -15~33/33(2W), POIL to RM: 8~48(2W)			POI to RM: -11~37/33(5W), POIL to RM: 12~52(5W)			POIL to RM: 0~40(0.25W)
	Uplink (dB)			0~30						
Rated mean output power (DL)				33dBm(2W)			37dBm(5W)			25dBm (0.25W)
Maximum Composite Output Power(UL)				-15dBm(Typ.)						
Noise Figure				≤ 5dB @Maximum gain, Center Frequency						
VSWR				≤ 1.3:1 @ BTS interface port						

		≤ 1.5:1 @ Internal interface port	
Optical Loss		0~5dBo	
System Delay		< 2us	
Spurious		Meet FCC rules, 3GPP TS 36.104, 3GPP2 C.S0010-C	
Dimension (WXDXH, in)	Head End Chassis	19 x 19.7 x 7.0	
	POI/POIL	1.3 x 17.0 x 6.85	2.6 x 17.0 x 6.85
	RU(Remote Unit) Chassis	19 x 15.0 x 7.0	
	RU Chassis RU(Remote Unit) N4X	9.85 x 15.0 x 6.6 for PS78 and VU	
	RM(Remote Module)	2.3 x 13.8 x 6.85	
Weight(lbs)	Head End Chassis	20.9(including NMS-AC)	
	POI/POIL	6.17/5.0	8.85
	RU(Remote Unit) Chassis	15.43	
	RU Chassis RU(Remote Unit) N4X	26.5	
	RM(Remote Module)	9.92	
Optic Connectors		SC/APC (Green)	
Optic Wavelength		1310nm for downlink, 1550nm for uplink	
Operating Temperature		-40 - 140°F(-40~60°C)	
Operating Humidity		5~90%RH	
Power Supply	Head-End	ADXV-H-NMS-AC: 100 to 240V, 50-60Hz with battery backup function ADXV-H-NMS-DC: -36V to -72V DC	

	RU	ADXV-R-PSU-AC: 100 to 240V, 50-60Hz with battery backup function
		ADXV-R-PSU-DC: -36V to -72V DC
Network Management System		Ethernet(RJ45)
RF connector	POI	DIN (Female) | SMA (Female) | SMB (Female)
	POIL	4.3-10 (Female) | SMB (Female)
	Remote Modules	4.3-10 (Female) | SMA (Female)
Weather Resistance (Remote Modules)		IP66

"The Manufacturer's rated output power of this equipment is for single carrier operation. For situations when multiple carrier signals are present, the rating would have to be reduced by 3.5 dB, especially where the output signal is re-radiated and can cause interference to adjacent band users. This power reduction is to be by means of input power or gain reduction and not by an attenuator at the output of the device."

1.2 900P_Specifications.

Parameters		900P	Comments
Frequency	Downlink	936.5~939.5MHz	
	Uplink	896~903MHz	
Input Power Range @ POIL	Power Mode	POIL: +25~ -15dBm	
System Gain	Downlink	POIL to RM: 8~48dB	
	Uplink	-20~10dB	
Maximum Composite Output Power(DL)		+33dBm(2W)	
Maximum Composite Output Power(UL)		-35dBm(Typ)	
Noise Figure		≤ 5dB @maximum gain, Center Frequency	
VSWR		≤ 1.5:1	
Optical Loss		0~5dBo	
System Delay		< 2us	
Spurious		Meet FCC rules, 3GPP TS 36.104, 3GPP2 C.S0010-C	

Dimension	POIL	1.31 x 6.86 x 17.02 inches	
(WXDXH)	RM(Remote Module)	2.29 x 6.86 x 13.79 inches	
Weight	POIL	5.0 lbs	
	RM(Remote Module)	9.3 lbs	
Operating Temperature		-40 ~ 131°F(-40 ~ 55°C)	
Operating Humidity		5~95%	
Power Supply	Head-End	ADXV-H-NMS-AC: 100 to 240V, 50-60Hz with battery backup function ADXV-H-NMS-DC: -36V to -72V DC	
	Remote Unit	ADXV-R-PSU-AC: 100 to 240V, 50-60Hz with battery backup function ADXV-R-PSU-DC: -36V to -72V DC	
Network Management System		Ethernet(RJ45)	
Optic Connectors		SC/APC (Green)	
Optic Wavelength		1310nm for downlink, 1550nm for uplink	
RF connector	POIL	4.3-10 (Female)	SMB (Female)	
	Remote Modules	4.3-10 (Female)	SMA (Female)	
Weather Resistance (Remote Modules)		IP66	

1.3 337FN_Specifications.

Parameters		700FN	Comments
Frequency	Downlink	728~768MHz	
	Uplink	698~716/776~798MHz	
Input Power Range @ POI	Power Mode	POIL: +48~ 0dBm	
@ POIL	Power Mode	POIL: +25~ -15dBm	
System Gain	Downlink	POIL to RM: -15~33dB	

		POIL to RM: 8~48dB	
	Uplink	-20~10dB	
Maximum Composite Output Power(DL)		+33dBm(2W)	
Maximum Composite Output Power(UL)		-35dBm(Typ)	
Noise Figure		≤ 6dB @maximum gain, Center Frequency	
VSWR		≤ 1.5:1	
Optical Loss		0~5dBo	
System Delay		< 2us	
Spurious		Meet FCC rules, 3GPP TS 36.104, 3GPP2 C.S0010-C	
Dimension (WXDXH)	POIL	1.31 x 6.86 x 17.02 inches	
	POI	1.31 x 6.86 x 17.02 inches	
	RM(Remote Module)	3.36 x 6.86 x 13.79 inches	
Weight	POI	6.2 lbs	
	POIL	5.0 lbs	
	RM(Remote Module)	11.7 lbs	
Operating Temperature		-40 ~ 131℉(-40 ~ 55℃)	
Operating Humidity		5~95%	
Power Supply	Head-End	ADXV-H-NMS-AC: 100 to 240V, 50-60Hz with battery backup function ADXV-H-NMS-DC: -36V to -72V DC	
	Remote Unit	ADXV-R-PSU-AC: 100 to 240V, 50-60Hz with battery backup function ADXV-R-PSU-DC: -36V to -72V DC	
Network Management System		Ethernet(RJ45)	
Optic Connectors		SC/APC (Green)	
Optic Wavelength		1310nm for downlink, 1550nm for uplink	
RF connector	POI	7/16 DIN(Female)	SMB (Female)	
	POIL	4.3-10 (Female)	SMB (Female)	

		4.3-10 (Female) | SMA (Female)	
	Remote Modules	4.3-10 (Female) | SMA (Female)	
Weather Resistance (Remote Modules)		IP66	

1.3 37N77L/37N77H_Specifications.

Parameters		N77L	N77H	Comments
Frequency	Downlink	3450~3550MHz	3700~3980MHz	
	Uplink			
Input Power Range @ POI	Power Mode	POIL: +48~ 0dBm		
System Gain	Downlink	POIL to RM: -15~37dB		
	Uplink	-20~10dB		
Maximum Composite Output Power(DL)		+37dBm(5W)		
Maximum Composite Output Power(UL)		-35dBm(Typ)		
Noise Figure		≤ 6dB @maximum gain, Center Frequency		
VSWR		≤ 1.5:1		
Optical Loss		0~5dBo		
System Delay		< 2us		
Spurious		Meet FCC rules, 3GPP TS 36.104, 3GPP2 C.S0010-C		
Dimension (WXDXH)	POI	1.31 x 6.86 x 17.02 inches		
	RM(Remote Module)	4.33 x 6.86 x 13.79 inches		
Weight	POI	6.2 lbs		
	RM(Remote Module)	11.7 lbs		
Operating Temperature		-40 ~ 131°F(-40 ~ 55°C)		
Operating Humidity		5~95%		
Power Supply	Head-End	ADXV-H-NMS-AC: 100 to 240V, 50-60Hz with battery backup function ADXV-H-NMS-DC: -36V to -72V DC		

		ADXV-R-PSU-AC: 100 to 240V, 50-60Hz with battery backup function	
	Remote Unit	ADXV-R-PSU-DC: -36V to -72V DC	
Network Management System		Ethernet(RJ45)	
Optic Connectors		SC/APC (Green)	
Optic Wavelength		1310nm for downlink, 1550nm for uplink	
RF connector	POI	7/16 DIN(Female) | SMB (Female)	
	Remote Modules	4.3-10 (Female) | SMA (Female)	
Weather Resistance (Remote Modules)		IP66	

1.4 S8 Specifications.

Parameters		S8_FCC	S8_IC
Frequency	Downlink	851-861 MHz (B9B) 861-862 MHz (Guard) 862-869 MHz (B2I)	851-866 MHz 866-869 MHz
	Uplink	806-816 MHz (B9B) 816-817 MHz (Guard) 817-824 MHz (B2I)	806-821MHz 821-824MHz
Input Power Range @ POIL	Power Mode	POIL: +25~ -15dBm	
System Gain	Downlink	POIL to RM: 8~48dB	
	Uplink	-20~10dB	
Maximum Composite Output Power(DL)		33dBm +/- 0.5 dBm	
Maximum Composite Output Power(UL)		-35dBm(Typ)	
Noise Figure		≤ 5dB @maximum gain, Center Frequency	
VSWR		≤ 1.5:1	
Optical Loss		0~5dBo	
System Delay		< 2us	

| Spurious		Meet FCC rules, 3GPP TS 36.104, 3GPP2 C.S0010-C
Dimension (WXDXH)	POIL	1.31 x 6.86 x 17.02 inches
	RM (Remote Module)	2.29 x 6.86 x 13.79 inches
Weight	POIL	5.0 lbs
	RM (Remote Module)	9.3 lbs
Operating Temperature		-40 ~ 131℉ (-40 ~ 55℃)
Operating Humidity		5~95%
Power Supply	Head-End	ADXV-H-NMS-AC: 100 to 240V, 50-60Hz with battery backup function ADXV-H-NMS-DC: -36V to -72V DC
	Remote Unit	ADXV-R-PSU-AC: 100 to 240V, 50-60Hz with battery backup function ADXV-R-PSU-DC: -36V to -72V DC
Network Management System		Ethernet(RJ45)
Optic Connectors		SC/APC (Green)
Optic Wavelength		1310nm for downlink, 1550nm for uplink
RF connector	POIL	4.3-10 (Female) | SMB (Female)
	Remote Modules	4.3-10 (Female) | SMA (Female)
Weather Resistance (Remote Modules)		IP66

9. MECHANICAL DRAWING

9.1 HE
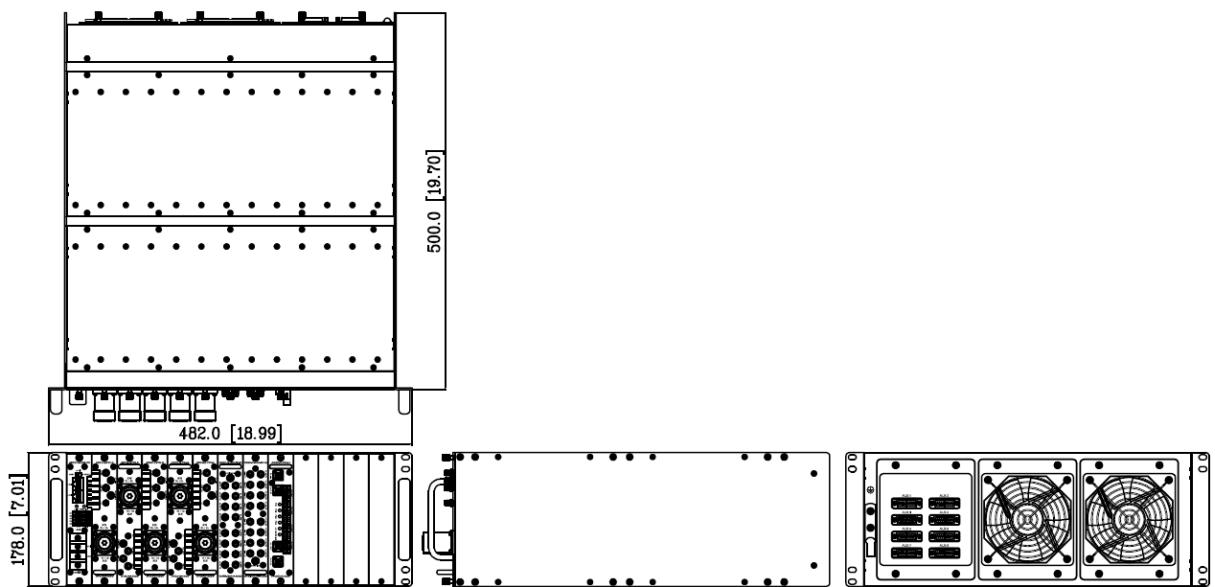
Figure 9-1   HE Drawing

9.2 RU

Figure 9-2   RU Drawing