ADXV Series DAS

Simply Incredible, Incredibly Simple™

5G Ready

With the increasing user demand for better coverage and additional capacity, Distributed Antenna Systems (DAS) have become a key element of carrier networks.

ADRF's ADXV Series DAS is the leading optical distribution system that covers the full range of power levels, sending signals loss-free for both indoor and outdoor applications.

ADXV Series meets all distribution needs from the simplest to the most complex venues. It is capable of transporting frequencies from VHF to 4 GHz regardless of protocol or modulation.

ADXV has two main components: the Head End (HE) and the Remote Unit (RU). The Head End is collocated with the base station or bi-directional amplifier and connected via an RF interface. The RF signals are transported to the Remote Units via single mode fiber.
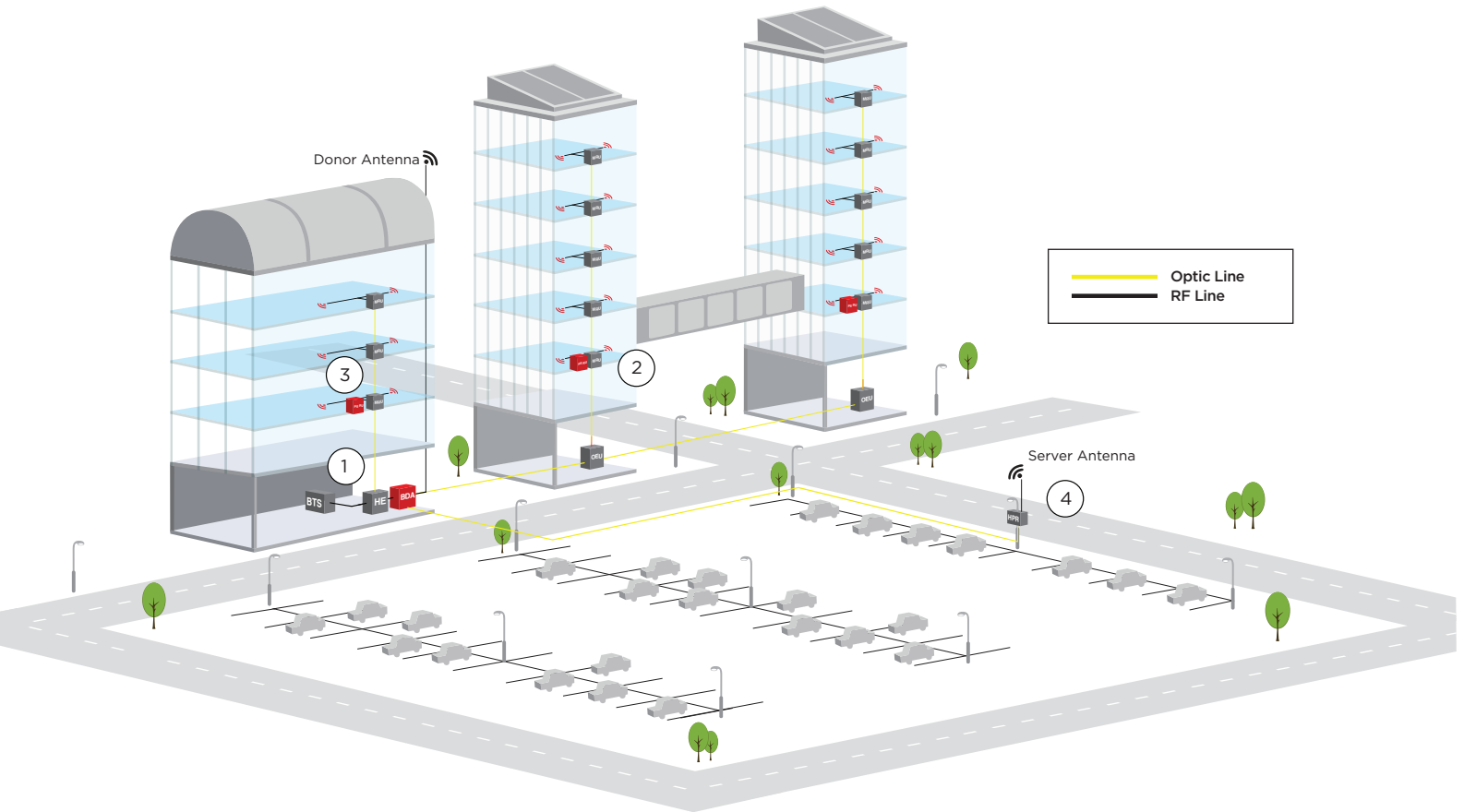
Product Features

- **Innovation:** Leverages patented Auto Commissioning Routine™ and built-in Spectrum Analyzer and Signal Generator to expedite commissioning and optimization
- **Reliability:** Carrier-grade, NEBS Level 3 compliant platform ensures lowest OpEx as well as CapEx
- **Cost Efficiency**: Best-in-class modularity and flexibility enables pay as you grow to add other carriers or overlay new bands without dreaded rip and replace
- **Ease**: Famed ADRF web-based GUI simplifies turn-up as well as remote troubleshooting
- **Availability:** ADRF's vertically integrated supply chain allows our commitment to the industry's shortest lead times
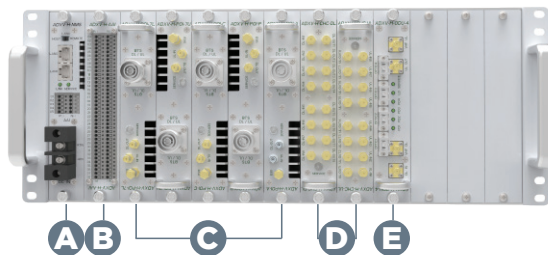
ADRF

ADXV Series DAS

Simply Incredible, Incredibly Simple™
ADXV meets all distribution needs from the simplest to the most complex venues.

Donor Antenna

Optic Line
RF Line

Server Antenna

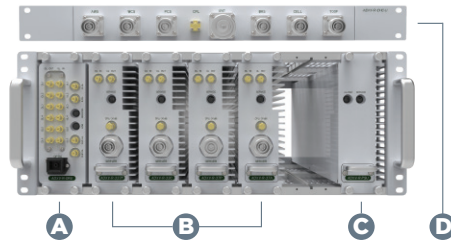**1** **HE**
(Head End)

A B C D E

Head End (HE) Features:

- Supports up to 12 modules (excluding NMS slot in the 19" rack, 4U)
- Supports daisy chaining of up to 15 HE units with an Ethernet switch
- Supports up to 8 expansion racks (1U) to support an additional
- Built-in CW Generator, Spectrum Analyzer, Programmable Power Sharing, Noise/Channel Power Level detection
- Supports direct BTS interface, max 48dBm input (DIN) per Point of Interface (POI) card
- Automatic Level Control (ALC) of input RF power to user set value
- System-wide firmware update from the HE
- Remote monitoring and control capability using our famed Web-based GUI
- Supports Dry Contact Alarming and SNMP v1, v2c, v3 protocols

Head End (HE) Components:

A Head End Network Management System (ADXV-H-NMS-AC / ADXV-H-NMS-DC)

B Head End Auxiliary Alarm Interface Module (ADXV-H-AAI)

C Head End Point of Interface Module (ADXV-H-POI-xx)

D Head End Channel Combiner Unit (ADXV-H-CHC-xx-X)

E Head End Optical Donor Unit Module (ADXV-H-ODU-4-X)

② MPR
(Mid-Power Remote Unit)

Mid-Power Remote Unit (MPR) Features:

- Supports up to 6 Band Specific Remote Modules (excluding ORU slot in the 19" rack, 4U)
- Built-in Spectrum Analyzer
- System-Wide Commissioning of all remotes to user set value
- Local Ethernet interface to the MPR
- Optional expansion rack (1.5U) to support additional 2 MPR modules
- Automatic Level Control (ALC) of output RF power to user set value
- Noise/Channel Power Level detection
- Band Specific Remote Modules available in 2W/5W
- 30dB test ports at each Remote Module
- PIM Rated 4.3-10 RF Output Connectors

Mid-Power Remote Unit (MPR) Components:

Ⓐ Mid-Power Remote Optical Remote Unit Module (ADXV-R-ORU-X)

Ⓑ Mid-Power Remote Amplifier Module (ADXV-R-33xx / ADXV-R-37xx)

Ⓒ Mid-Power Remote Power Supply Unit Module (ADXV-R-PSU-AC, ADXV-R-PSU-DC)

Ⓓ Mid-Power/High-Power Remote Universal Channel Combiner (ADXV-R-CHC-X2)

---

③ PS-MPR
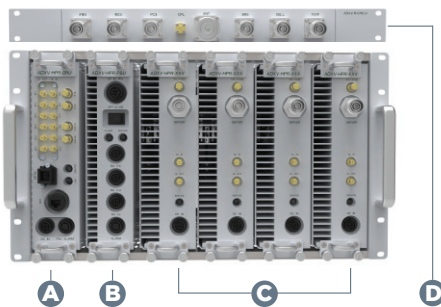**(Public Safety Mid-Power Remote Unit)**

Public Safety Remote Features:

- Available for Public Safety 700 MHz/800 MHz and VHF/UHF
- Built-in Spectrum Analyzer
- NEMA4 Certified
- Dry Contact Alarming
- Optional Battery Backup Support
- PIM Rated 4.3-10 Connectors
- Local Ethernet interface to the Remote Unit

- Automatic Level Control (ALC) of output RF power to user set value
- Noise/Channel Power Level detection
- 33dBm Composite Output Power for Public Safety 700MHz/800 MHz
- 25dBm Composite Output Power for Public Safety VHF/UHF

---

④ HPR
(High-Power Remote Unit)
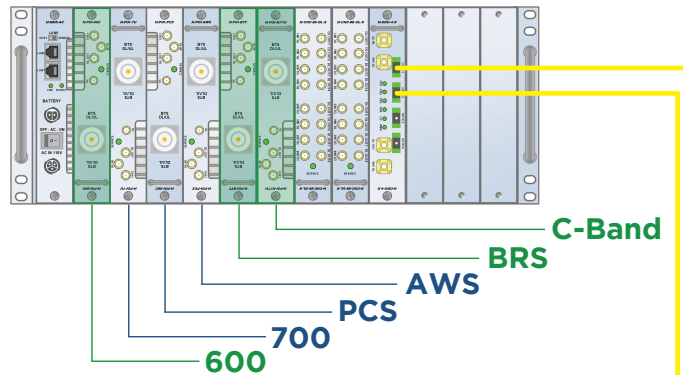

High-Power Remote (HPR) Features:

- Supports up to 6 Band Specific HPR Modules
- Built-in Spectrum Analyzer
- System-Wide Commissioning of all remotes to user set value
- Local Ethernet interface to the HPR
- Optional expansion rack (2U) to support one additional HPR module
- Automatic Level Control (ALC) of output RF power to user set value
- Noise/Channel Power Level detection
- Band Specific Modules available in 20W/40W
- 40dB test ports at each HPR module
- PIM Rated 4.3-10 Connectors
- IP66 Rating
- Optional Pole Mount Kit
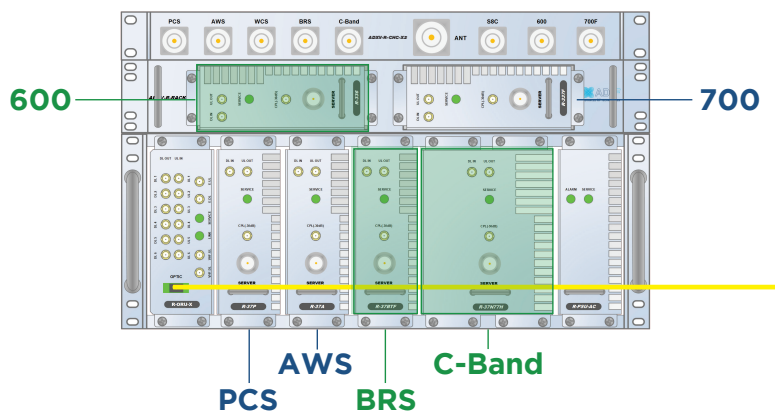
High-Power Remote Unit (HPR) Components:

Ⓐ High-Power Remote Optical Remote Unit Module (ADXV-HPR-ORU-X)

Ⓑ High-Power Remote Power Supply Unit Module (ADXV-HPR-PSU-AC-50)

Ⓒ High-Power Remote Amplifier Module (ADXV-HPR-43xx / ADXV-HPR-46xx)

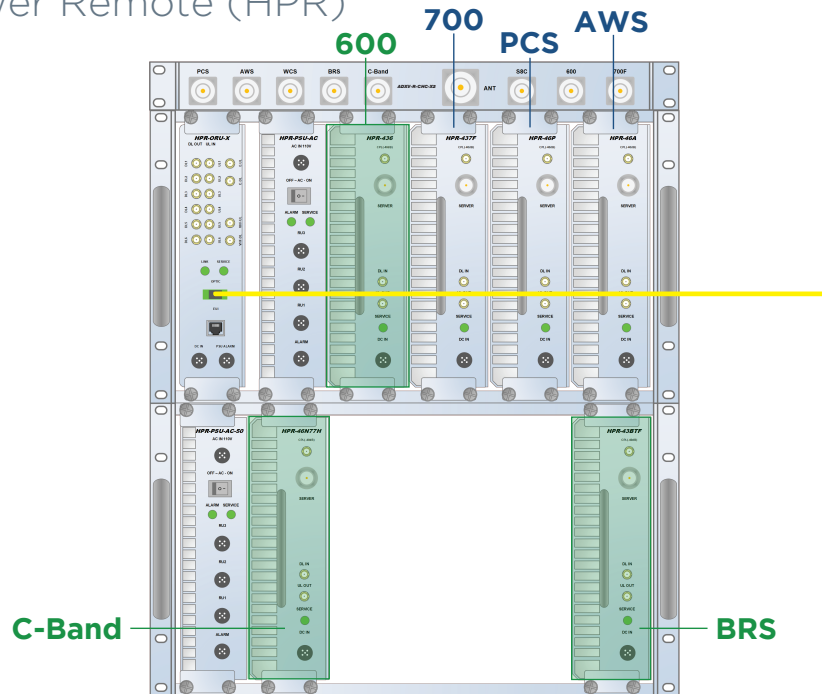**Ⓓ** Mid-Power/High-Power Remote Universal Channel Combiner (ADXV-R-CHC-X2)

ADXV 5G Upgrade

ADXV Head End (HE)

C-Band
BRS
AWS
PCS
700
600

ADXV Mid-Power Remote (MPR)

600

700

PCS
AWS
BRS
C-Band

ADXV High-Power Remote (HPR)

700   PCS   AWS
600

C-Band

BRS