

CriticalPoint™ Public Safety Bi-Directional Amplifier



UHF BDA

Specifically configured for the Miami market

Features

- Supports P25 P1/P2, digital and conventional analog communications simultaneously
- Internal dual window filter supported
- Up to 32 narrow band filters (Class A)
- Up to 4 wide band filters (Class B)
- Channelized Auto Level Control (ALC) supported (Class A)
- Channelized uplink squelch supported (Class A)
- Uplink PA shutdown during no traffic periods to minimize noise being introduced to the network" (Class A)
- Built-in mandatory isolation test to prevent BDA oscillation
- Auto shutdown with alarm upon oscillation detection
- Web based GUI for intelligent configuration, SNMP supported
- NFPA 1221 / IFC compliant dry contact alarms
- DC: UL50E Type 4 / NEMA 4 enclosure, AC: NEMA 4 enclosure
- **FCC Class A: PX8-RX4122-A, Class B: PX8-RX4122-B**
- **DC: UL2524 Standard Certified – SGS Certificate No.: SGSNA/20/GZ/00054**
- **AC: UL 60950-1 & UL 60950-22 Standards Certified – SGS Certificate No.: SGSNA/18/GZ/00076**



Specifications

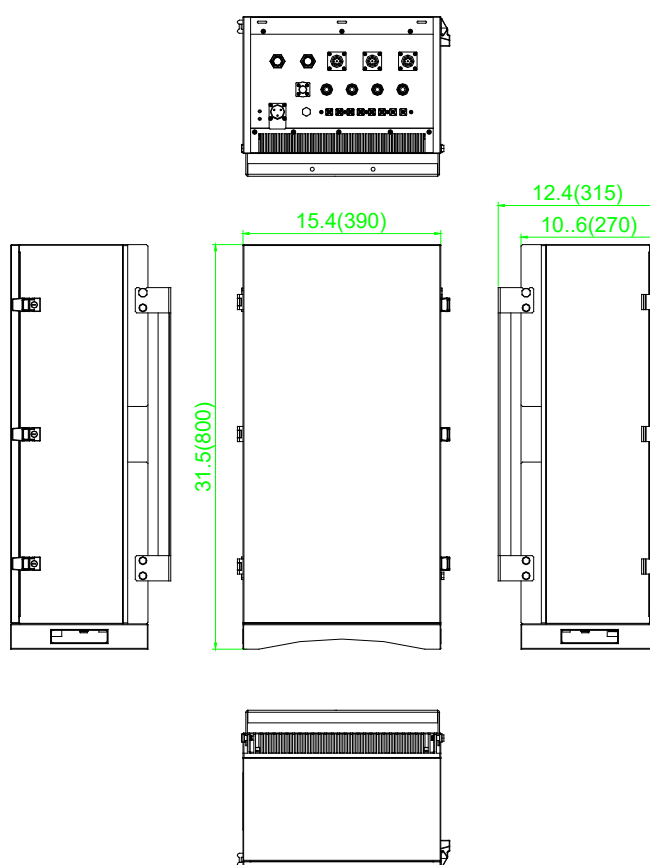
Electrical		
Passband 1 (Downlink / Uplink)	MHz	DL: 452.8 - 453.8 / UL: 457.8 - 458.8
Passband 2 (Downlink / Uplink)	MHz	DL: 460.4 - 461.4 / UL: 465.4 - 466.4
Total Output Power, Uplink	dBm	27
Total Output Power, Downlink	dBm	33
Maximum System Gain	dB	95
Gain Adjustment Range (1dB step)	dB	0-30
Pass Band Ripple, p-p	dB	≤3
Uplink Noise Figure	dB	≤7
Intermodulation	dBm	≤ -13
Spurious	dBm	FCC Compliance
Maximum RF Input Level without Damage	dBm	0
Maximum RF Input Level without Overdrive	dBm	-10
Input VSWR		≤ 1.5
Impedance	Ω	50

Filters	Class A		Class B	
Number of Filters	32		4	
Filter Bandwidth Out-of-Band Suppression System Group Delay	6.25KHz	≥ 60dBc @ filter center + 60KHz, 35us	200KHz – 5MHz	≥ 45dBc @ filter edge + 0.6MHz ≥ 60dBc @ filter edge + 1MHz 6.5us
	12.5KHz	≥ 60dBc @ filter center + 65KHz, 35us		
	25KHz	≥ 50dBc @ filter center + 75KHz, 27us		
	75KHz	≥ 60dBc @ filter center + 200KHz, 15us		

Mechanical		
Dimensions, H x W x D	in(mm)	31.5x15.4x12.4 (800×390×315)
Weight without Bracket	lb(kg)	140 (63.5)
Power Supply	VDC	-40 to -58
	VAC	120
Power Consumption	W	85
RF Connectors		N-Female
Operating Temperature	°F(°C)	-27 to +140 (-33 to +60)
Operating Humidity		≤ 95%
Environmental Class		DC: UL50E Type 4 / NEMA 4 AC: NEMA 4

Note: Typical specifications at room temperature

Outline Drawing



Part Numbers

Part Number	Description
RX45V1-ADC-MAM-UL	Class A, DC, 33/27dBm Downlink/Uplink Power, 95dB Gain, Duplexed DT/MT, for Miami, UL2524 Standard Certified
RX45V1-BDC-MAM-UL	Class B, DC, 33/27dBm Downlink/Uplink Power, 95dB Gain, Duplexed DT/MT, for Miami, UL2524 Standard Certified
RX45V1-AAC-MAM	Class A, AC, 33/27dBm Downlink/Uplink Power, 95dB Gain, Duplexed DT/MT, for Miami
RX45V1-BAC-MAM	Class B, AC, 33/27dBm Downlink/Uplink Power, 95dB Gain, Duplexed DT/MT, for Miami