

# PSR-VU-9537

## VHF/UHF Channelized Digital Repeater

The PSR-VU-9537 is a new dual band (VHF/UHF) digital public safety repeater designed to protect the lives of first responders and building occupants.

Through the use of digital filtering technology (DSP), the PSR-VU-9537 helps eliminate adjacent channel interference to allow band selectivity and support VHF and UHF rebanding. Up to 1 wide band and up to 8 non-contiguous narrow bands can be simultaneously supported in each of the VHF and UHF Public Safety frequencies via ADRF's celebrated web-based GUI, which provides versatility and total control to the user.

The PSR-VU-9537 is fully compliant with International Fire Code (IFC) and National Fire Protection Association (NFPA). This ensures that first responders have reliable radio communications in small to large buildings. It is the next generation in ADRF's acclaimed PSR Series Public Safety Repeaters.



### Product Features

- ▶ NEMA 4X compliant enclosure suitable for both indoor and outdoor environments
- ▶ High performance bandpass filter
- ▶ Alarming output to supervised circuits for: antenna failure, amplifier failure, AC failure, power supply, battery, and charger failure
- ▶ Supports up to 1 wideband and up to 8 non-contiguous narrow bands
- ▶ Center frequencies adjustable in 0.5 KHz step
- ▶ Bandwidths adjustable in 250 KHz step
- ▶ AC Power for 110 VAC / 220 VAC

# Product Specifications

PSR-VU-9537 (VHF/UHF Channelized Digital Repeater)



## Technical Specifications

	Downlink	Uplink
Frequency Range	VHF: 136-174 MHz UHF: 380-512 MHz	VHF: 136-174 MHz UHF: 380-512 MHz
Composite Output Power	VHF: 28 dBm UHF: 37 dBm	VHF: 24 dBm UHF: 27 dBm
System Gain	VHF: 85 dB UHF: 85 dB (APCO25)   95 dB (LMR450)	VHF: 85 dB UHF: 85 dB (APCO25)   95 dB (LMR450)
Filter Selection	Wide / Narrow / Wide and Narrow Band	Wide / Narrow / Wide and Narrow Band
Simultaneous Filter Support	Up to 1 Wide Band and Up to 8 Non-Contiguous Narrow Bands	
Passband Filter Bandwidth	Wide: 1/2/4/5 MHz   Narrow: 6.25-331.25KHz (6.25 x n , n= 1~53)	
Filter Roll-off	Wide: 65dBc@Filter Bandwidth Edge + 500KHz   Narrow: 60dBc@Filter Bandwidth Edge + (Filter BW / 2)	
Passband Ripple	±2 dB	
Channel Setting Resolution	0.5 kHz	
Noise Figure @ Max Gain	< 3.5 dB without duplexing	
Output ALC Dynamic Range	60 dB	
Gain Dynamic Range	45 dB	
System Group Delay	5-240 us	
Spurious	FCC Compliant	
AC Power	110 -240 VAC, 60 Hz (Free Voltage)	
Power Consumption	UHF Band: 210 W   VHF Band: 260 W	
Max RF Input	-20 dBm (up to +10 dBm without damage)	
Impedance	50 Ω	
VSWR	< 1.3 : 1	
Humidity	5% - 90% condensed	
Remote Alarm / Network	Dry Contacts Outputs, Web-GUI, SNMP, SNMP-Traps	

## Mechanical Specifications

Dimensions (W x D x H)	12.0 x 13.0 x 21.7 in (w/out mount bracket)
Weight	65lbs (w/out mount bracket)
Connectors	4,3-10 (Female)
Weather Resistance	IP66
Operating Temperature	-40°F to +140°F (-40°C to +60°C)

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