

P25 CABINET REPEATER

Areas of reduced radio system coverage can exist due to terrain issues, lack of in-building coverage, or the sub-optimal placement of fixed site infrastructure. In these scenarios a P25 Cabinet Repeater can assist, keeping emergency responders connected.

The Futurecom P25 Cabinet Repeater includes an indoor wall mount enclosure, power supply, battery backup, filtering and cabling. It seamlessly integrates with remote mount Motorola APX™ mobile radios. The P25 Cabinet Repeater is also available in an outdoor enclosure, which can be configured for pole mount installation.

KEY FEATURES AND BENEFITS

- Programmable output power: 1-10 W.
- Available in VHF, UHF and 800 MHz bands.
- Extends key P25 trunking features to 'DVRS Enabled' portable radio users including:
 - Portable Push-to-talk and Emergency ID pass-through.
 - Go Ahead and Deny Tones.
- Out of Range, Site Trunking and Failsoft System Status Broadcasts.
- Cost-effective alternative to incremental fixed site infrastructure in low traffic areas.
- P25 Digital / Analog operation.
- Full duplex or simplex operation.
- In-Band or Cross-Band configurations.
- Integrates with remote mount APX 8500, APX 7500, APX 6500 and APX 5500 mobile radios.
- Only 30 dB of isolation required between antennas.
- Sold exclusively through Motorola Solutions.





GENERAL SPECIFICATIONS

DIMENSIONS: HEIGHT x WIDTH x DEPTH, WEIGHT	
Indoor Cabinet	520 x 520 x 230 mm (20.5 x 20.5 x 9.0 in) 22.7 kg (85 lb)
Outdoor Cabinet	1170 x 570 x 260 mm (46.0 x 22.3 x 10.1 in) 90 kg (198 lb) without batteries
Battery Enclosure (Included With Outdoor Cabinet)	410 x 510 x 250 mm (16.0 x 20.0 x 10.0 in)
Channel Spacing	12.5 or 25 kHz programmable (25 kHz operation not available in USA)
Number of Channels	192
CTCSS/DCS	Programmable per channel
Antenna Impedance	50 ohms
Duty Cycle	Continuous (DVR)



EXTERNAL CONNECTORS	
Antenna	N Female
Computer Interface	USB
Power Supply	MS3102E14-7P

	INDOOR CABINET	OUTDOOR CABINET		
Power Supply	115 V or 230 V AC ±15%, 47-63Hz, Single Phase, Hard wired			
Current Drain (Transmit)	2.8 A max (110 V)	6 A max (110 V) 3 A max (230 V)		
Battery Backup	up 30 minutes (50/50 Duty Cyc			
Operating Temperature	-30 °C to +40 °C (-22 °F to +104 °F)	-30 °C to +60 °C (-22 °F to +140 °F)		



OUTDOOR ENCLOSURE	
Enclosure Type	Textured light-gray polyester powder paint
Mounting Options	Wall Mount
Locks	Padlock Handle

OUTDOOR ENCLOSURE	
Enclosure Type	NEMA / EEMAC TYPE 4, 12, 13, IP66
Mounting Options	Pole Mount or Wall Mount
Battery Protection	Low Voltage Disconnect (LVD), Reverse Protection, Temperature Compensated Charging Voltage
Battery Low Voltage	10.5 V DC (AC voltage be reapplied to reconnect the battery after it is disconnected by LVD)
Rf Connector Lightning Protection	GAS Capsule (Spark Gap)
Locks	Padlock Handle

^{*}Specifications are subject to change without notice

EQUIPMENT TYPE ACCEPTANCE				
	VHF	UHF	800 MHz	
FCC	136-174 MHz L06-DVRSVHF	380-406 MHz 406.1-512 MHz L06-DVRSUHF	806-824 MHz 851-869 MHz L06-DVRS800	
Industry Canada	138 -174 MHz 2098B-DVRSVHF	406.1-430 MHz 450-470 MHz 2098B-DVRSUHF	806-824 MHz 851-869 MHz 2098B-DVRS800	
TRANSMITTER SPECIFICATIONS				
	VHF	UHF	800 MHz	
Frequency Band	136-174 MHz	380-430 MHz 450-470 MHz	851-869 MHz	
Power Output @ Antenna Port	10 W (programmable per channel from 1 W to 10 W)			
CTC Option	15 sec to 15 min or disabled			
Max Spurious Output		-20 dBm		
Frequency Stability	±1.5 ppm (±1 ppm, 800 MHz band)			
FM Hum and Noise (12.5 / 25 kHz)		-37 dB / -43 dB		
Audio Response	+1, -3 dB of 6 dB / oct	ave pre-emphasis characterist	tic over 300 Hz to 3 kHz	
Audio Distortion		<2%		
RECEIVER SPECIFICATIONS				
	VHF	UHF	800 MHz	
Frequency Band	136-174 MHz	380-430 MHz 450-470 MHz	806-824 MHz 851-869 MHz	
Receiver Sensitivity		-115 dBm		
Frequency Stability Selectivity (12.5 / 25 kHz)		-60 dB / -75 dB		
Intermodulation		-70 dB		
Deviation (12.5 / 25 kHz)		±2.5 kHz / ±5 kHz		
FM Hum and Noise (12.5 / 25 kHz)	-37 dB / -43 dB			
Audio Output (Repeater Detect Audio)	600 mV RMS nominal, flat response			
Audio Response	+1, -3 dB of 6 dB / octave de-emphasis characteristic over 300 Hz to 3 kHz			
Audio Distortion		<2%		

MOTOROLA CUSTOMERS HAVE INSTALLED P25 CABINET REPEATERS IN THE FOLLOWING APPLICATIONS:

- FIRE STATIONS
- COLLEGE CAMPUSES
- ELEMENTARY AND HIGH SCHOOLS AIRPORTS
- HOSPITALS
- MANUFACTURING PLANTS
 OUTDOOR COVERAGE HOLES

- MILITARY BASES
- ROAD TUNNELS
- SUBWAY STATIONS

P25 Cabinet Repeater extends portable radio communications into buildings and outdoor coverage holes.





