P25 FIXED MOUNT DIGITAL VEHICULAR REPEATER SYSTEM



Areas of reduced radio system coverage can exist due to lack of in-building coverage, outdoor terrain or the omission of adequate fixed site infrastructure. In these scenarios a permanently mounted P25 DVRS can help fill in areas of poor coverage and assist in keeping emergency responders connected in the moments that matter.

The Fixed Mount DVR includes an indoor wall mount enclosure, power supply, battery backup, filtering and cabling. It seamlessly integrates with remote mount Motorola APX™ or XTL™ series mobile radios. The Fixed Mount DVR is also available in an optional outdoor enclosure and can be configured for pole mount installation.

Key Features & Benefits

- · Programmable output power: 1-10 watts.
- · Available in VHF, UHF, 700 MHz and 800 MHz bands.
- Extends key P25 trunking features to the '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[™]5500, APX[™]6500 and APX[™]7500 mobile radios.
- Only 30dB of Isolation required between antennas.
- · Sold exclusively through Motorola Solutions.



GENERAL SPECIFICATIONS



Dimensions: Height / Width / Depth / Weight

Indoor Cabinet

520.5mm (20.5") x 520.5mm (20.5") x 228.6mm (9")

85 lbs. (22.7 Kg)

Outdoor Cabinet

1168mm (46") x 566mm (22.3") x 258mm x (10.1")

198 lbs. (90 kg) without batteries

Battery Enclosure (Included with Outdoor Cabinet)

406mm (16") x 508mm (20") x 254mm (10")

Channel Spacing

12.5 or 25 kHz programmable

Number of Channels

192

CTCSS / DCS

Programmable per channel

Power Supply

Indoor Cabinet

115V or 230 VAC +/- 15%

Outdoor Cabinet

115V or 230V AC +/-15%, 47-63Hz,

Single Phase, Hard wired

Current Drain

Indoor Cabinet Outdoor Cabinet

Standby Receive 0.5A (110V AC) 6A AC Max (115 AV)

Transmit 2.8A 3 A Max at 230V AC

Battery Backup

Indoor Cabinet

30 Minutes (50/50% Duty Cycle)

Outdoor Cabinet

2 hours (50/50% Duty Cycle) - 25°C, New Battery

Operating Temperature

Indoor Cabinet

-30°C to +40°C

Outdoor Cabinet

-30°C to +40°C

Antenna Impedance

50 Ohms

Duty Cycle

Continuous (DVR)

External Connectors

Antenna

N Female

Computer Interface

USB

Power Supply

MS3102E14-7P



GENERAL SPECIFICATIONS



Equipment Type Acceptance	VHF	UHF	700 MHz	800 MHz
FCC	136 – 174 MHz LO6-DVRSVHF	380-406 MHz 406.1-512 MHz LO6-DVRSUHF	764-776 MHz 794-806 MHz LO6-DVRS700	806-824 MHz 851-869 MHz LO6-DVRS800
Industry Canada	138 – 174 MHz 2098B-DVRSVHF	406.1-430 MHz 450-470 MHz 2098B-DVRSUHF	768-776 MHz 798-806 MHz 2098B-DVRS700	806-824 MHz 851-869 MHz 2098B-DVRS800
Transmitter Specifications	VHF	UHF	700 MHz	800 MHz
Frequency Band [MHz]	136 – 174 MHz	380-430 MHz 450-470 MHz 470-512 MHz	764-776 MHz	851-869 MHz
Power Output @ Antenna Port	10 W (programmable per channel from 1W to 10W)			
CTC Option	15 sec to 15 min or Disabled			
Max Spurious Output	-20dBm			
Frequency Stability	+/- 1.5ppm (Note1)			
FM Hum and Noise 12.5/25 kHz	37 dB / 43 dB			
Audio Response	+1, -3 dB of 6 dB / octave pre-emphasis characteristic over 300 Hz - 3 kHz			
Audio Distortion	<2%			

Receiver Specifications	VHF	UHF	700 MHz	800 MHz
Frequency Band [MHz]	136 – 174 MHz	380-430 MHz 450-470 MHz 470-512 MHz	794-806 MHz 764-776 MHz	806-824 MHz 851-869 MHz
Receiver Sensitivity	-115 dBm			
requency Stability				
Selectivity 12.5 / 25 kHz	60 dB / 75 dB			
ntermodulation	70 dB			
Deviation 12.5 / 25 kHz	+/-2.5 kHz / +/-5 k	Hz		
FM Hum and Noise 12.5 / 25 kHz	37 dB / 43 dB			
Audio Output (Repeater Detect Aud	lio) 600 mV RMS non	ninal, flat response		
Audio Response			s characteristic over	300 Hz – 3 kHz
Audio Distortion	<2%			

Note 1: +/- 1.0ppm at 800Mhz in order to meet FCC / IC regulations



GENERAL SPECIFICATIONS



Indoor Enclosure

Enclosure Type	Textured light-gray polyester powder paint
Lifelosure Type	rextured 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 10.5V DC (AC voltage has to be reapplied to reconnect the battery

after it is disconnected by LVD)

RF Connector Lightning Protection GAS Capsule (Spark Gap)

Locks Padlock Handle

Motorola Customers have installed Fixed Mount Digital Vehicular Repeaters in the following applications:

- Fire Stations
- College Campuses
- · Elementary and High Schools
- Hospitals
- Manufacturing Plants
- · Outdoor coverage holes
- Subway Stations
- Road Tunnels
- Military Bases
- Airports





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^{*}Specifications are subject to change without notice