

MOBEXCOM P25

FIXED MOUNT
DIGITAL VEHICULAR REPEATER SYSTEM



P25 COVERAGE TO GO

FIXED MOUNT P25 DIGITAL VEHICULAR REPEATER SYSTEM

DESIGNED FOR PUBLIC SAFETY APPLICATIONS

Futurecom Vehicular Repeaters have been successfully deployed and in use by numerous Police and Fire Departments across the US and Canada for more than 15 years. The last generation of Digital Vehicular Repeaters offers seamless performance by extending voice communications as well as trunking system features to the portable radio users.

PORTABLE RADIO COVERAGE EXTENDER

Digital Vehicular Repeater Systems (DVRS) are used to provide reliable portable radio communications in areas where portable radio users have marginal to none direct access to the Radio System.

ENCLOSURE OPTIONS

Two enclosure types are available – Indoor wall mount and Outdoor wall or pole mount.

COMPATIBILITY

The Fixed mount DVRS is a self contained, fully integrated package and easy to deploy in the field. The Vehicular Repeater, Mobile radio, power supply, battery backup, filtering and accessories are mounted inside the Fixed mount enclosure.

The DVRS is compatible with remote mount XTL™2500 (M5 Control Head) or remote mount XTL™5000 (O3 or O5 Control Head).

ANTENNAS

The DVRS requires two antennas – one for communications with the System and another for provision of local portable radio coverage.

POWER UP OPTIONS

The Fixed mount DVRS is powered by connecting to standard 117 V AC power outlet and includes a built-in battery backup. If required, the unit can be configured for 230 V AC operation.

FIXED MOUNT DVRS APPLICATIONS

The Fixed Mount DVRS can be used instead of a Bi-Directional Amplifier (BDA) for in-building radio coverage extension or as a Site extender in remote rural areas. The DVRS has many advantages compared to other types of fixed radio coverage extenders.



	FULL TRUNKED SITE	BROADBAND BDA	CHANNELIZED BDA	FIXED DVRS
CAPITAL COST	VERY HIGH	LOW	HIGH	LOW
OPERATIONAL COST	HIGH	LOW	MODERATE	LOW
PHYSICAL SIZE	LARGE	SMALL	MODERATE	SMALL
INTERFERENCE REJECTION	EXCELLENT	POOR	GOOD	EXCELLENT
ISOLATION REQUIRED	NO	YES Suitable Only for Indoor Systems	YES Suitable Only for Indoor Systems	ONLY 30dB
STAND-ALONE REPEATER MODE	POSSIBLE (FALLBACK)	NO	NO	YES
CROSS-BAND OPERATION	NOT APPLICABLE	NO	POSSIBLE	POSSIBLE
TRANSMIT POWER PER CHANNEL	VERY HIGH	VERY LOW	HIGH	HIGH
RECEIVER SENSITIVITY	VERY HIGH	VERY LOW	HIGH	HIGH
NUMBER OF SIMULTANEOUS CONVERSATIONS	Same as Host system	Same as Host system	Same as Host system	ONE
NUMBER OF P25 TALK GROUPS	SAME AS HOST SYSTEM	SAME AS HOST SYSTEM	SAME AS HOST SYSTEM	SAME AS HOST SYSTEM
SPECIFIC LIMITATIONS	Requires connection to Trunking system controller.	Broadband - passes undesired signals. Cannot be too far from a Host site.	Signal delay can affect system timing. Indoor Systems only.	Requires extra conventional channel.

General Specifications

Operating Temperature	-30°C to +40°C
CTCSS/DCS	Programmable per Channel
Antenna Impedance	50 Ohms
Number of Channels	64
Channel Spacing	12.5 or 25 kHz programmable
External Connectors	N female
Antenna (DVR and Mobile)	
Computer Interface	USB

Equipment Type Acceptance

	VHF	UHF	700	800
FCC	LO6-DVRSVHF	LO6-DVRSUHF	LO6-DVRS700	LO6-DVRS800
Industry Canada	2098B-DVRSVHF	2098B-DVRSUHF	2098B-DVRS700	2098B-DVRS800

Transmitter Specifications

	VHF	UHF	700	800
Frequency Band [MHz]	136-174	380-430 450-470 470-512	764-776	851-870
Power Output @ Antenna Port	10W (programmable per channel from 1W to 10W)			
CCT Option	15 sec to 15 min or Disabled			
Max Spurious Output	-20dBm			
Frequency Stability	+/- 1.5ppm			
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	800
Frequency Band [MHz]	136-174	380-430 450-470 470-512	794-806	806-825
Receiver Sensitivity	-115 dBm			
Frequency Stability	+/- 1.5ppm			
Selectivity 12.5 / 25 kHz	60 dB / 75 dB			
Intermodulation	75 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 pre-emphasis characteristic over 300 Hz – 3 kHz			
Audio Distortion	<2%			

Outdoor Enclosure

Dimensions: Height / Width / Depth	1168mm (46") x 566mm (22.3") x 258mm (10.16")
Enclosure type	NEMA / EEMAC TYPE 4, 12, 13, IP66
Mounting Options	Pole Mount or Wall Mount
Approximate Weight	90 kg (198lbs) approximately, without batteries
Battery Enclosure Dimensions:	406mm (16") x 508mm (20") x 254mm (10")
Power Supply	115V or 230V AC +/-15%, 47-63Hz, Single phase, Hard wired
Current Drain	6A AC max at 115V AC 3A AC Max at 230V AC
Battery Backup (25°C, new battery)	2 hours approximately at 50% Tx / 50% Rx Duty , Battery not provided.
Battery Protection	Low Voltage Disconnect, Reverse Protection, Temperature Compensated Charging Voltage
RF Connector Lightning Protection	Gas Capsule (Spark Gap)
Locks	Padlock Handle

Indoor Enclosure

Dimensions: Height / Width / Depth	520mm (20.5") x 520mm (20.5") x 230mm (9")
Enclosure Type	Wall mount, steel box
Approximate Weight	38.5kg (85lbs)
Power Supply	110 V AC OR 230 V AC +/-15%
Current Drain	Standby/Receive 0.5 A (110 V AC) Transmit 2.8 A (110 V AC)
Battery Backup	30 minutes

DVRS PRODUCTS AVAILABLE EXCLUSIVELY FROM MOTOROLA

Specifications subject to change without notice.



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