

MOTOROLA GR500 Mounted Repeater



Increase the range and capabilities of your mobile and portable radios with the GR Series of repeaters. It provides the flexibility to build a repeater which meets the frequency bands, power level and mounting requirements in a wide variety of applications.

- **Modular Design** - Allows quick field replacement of disabled components.
- **Wall-mount, lockable, heavy duty metal case** - Provides ability to remote mount the repeater in an unattended yet secure site.
- **Supports VHF/UHF Crossband Operation** - Allows UHF and VHF radios users to communicate with each other.
- **Internal Mounting Space for additional components** - Allows duplexers, preselectors and battery revert modules to be installed internally.
- **UL, CSA Approved**

The **Motorola GR500 Base Repeater Station** has been developed to offer a high level of durability and operational reliability. By using two GM300 mobile radios inserted in the GR housing, this is a base station solution, providing all the advantages and features of a mobile radio: VHF/UHF/Cross Band.

Power output is available for 25W Continuous. The housing contains a cooling fan, which is continuously in operation.

The GR500 station is available within the frequency ranges **136-174 MHz, 403-520 MHz** (ask for different band splits) output **1 Watt up to 25 Watts** (ask for different power output levels); **12,5 and 20/25 kHz** channel spacing. The optional **Duplexer** is available in all sub-bands.

Different types of Interconnect Interfaces are available:

- R*I*C*K Repeater Interface Communication Kit
- Multiple Tone Panel
- Basic Telephone Interconnects with Selective Calling for DTMF or Select5
- Remote Telephone Interface

GR500 Base Repeater Station

Standard Functional Hardware:



- Designed for Desk Top Operation
- Metal Enclosure with Temperature Controlled Fan
- Repeater Interface Communication Kit (RICK)
- Power Supply with Switchable Primary Voltage
- Complete Set of Cables to Facilitate Interconnections
- 2 Two-Way GM300 Radios Required
- Internal Mounting for Duplexer

Quality and Software Features:

- Remote Repeater Set-up and Knockdown
- Antenna Mismatch Protection
- Supports VHF/UHF/Cross Band
- Multiple Frequency Operation Available
- Time-Out Timer
- Synthesized and Field Programmable

Recommended Accessories:

- Tone Remote Adapter
- DC Remote Adapter
- Telephone Interconnects
- Front and Back Protective Covers with Carrying Handle
- Desk Top Controllers, TRC
- Desk Microphone

Specifications:

Transmitter		
	VHF	UHF
RF Output	25W	25W
Frequency Stability (-30C to +60C)	±2.5ppm	±1.5ppm
Spurs/Harmonics	-23 dBm	
Audio Responce	+1/-3 dB (From a 6dB/Oct Pre-emphasis 300 to 3000Hz)	
Audio Distortion	<3% EIA (@1000 Hz 60% Rated Max Deviation)	
Modulation Sensitivity	80 mV (rms for 60% deviation @ 1000 Hz)	
FM Noise	12.5kHz -40 dB 20/25/30 kHz -45 dB	
FM Modulation	11K0F3E/16K0F3E	
FCC Designation	ABZ99FT3023	ABZ99FT4023