

GR300/500

 **MOTOROLA**



# MOTOROLA

## Radius GR500



**CAUTION**  
TO REDUCE THE RISK OF  
FIRE OR ELECTRIC SHOCK,  
REPLACE WITH SAME TYPE  
AND RATING OF FUSE.

 **MOTOROLA**  
Radius GR 300

  
**Radius**



**Features/Advantages.**

- Designed for:
  - Desk Top Operation (GR300)
  - Wall Mounted Operation (GR500)
- Field Programmable
- Remote Repeater Set-up and Knockdown
- Desktop Control Point Operation (GR300)
- Supports VHF/UHF/Cross band
- Multiple Frequency Operation Available
- Time-Out Timer
- Internal Mounting for Duplexer

**Standard Repeater Model Includes:**

- Metal Enclosure with Temperature Controlled Fan (GR300)
- Wall Mount, Lockable, Heavy Duty Metal Case (GR500) with Continuous Fan
- Repeater Interface Communications Kit (R\*1\*C\*K)
- Power Supply with Switchable Primary Voltage
- Complete Set of Cables to Facilitate Interconnections

**Complete Repeater Package Requires The Addition Of:**

- 2 Radius GM300 Mobile Radios
- Duplexer (optional and available in all sub-bands)

**Optional Alternatives To The Standard Configuration**

- ZR310 Multiple Tone Panel
- i50R Basic Telephone Interconnect
- ZR320 Interconnect With Selective Calling
- ZR330 Remote Telephone Interface

**Accessories**

- Tone Remote Adapter
- DC Remote Adapter
- Front and Back Protective Covers with Carrying Handle (GR300)
- C100 Desk Set
- Antenna Systems
- Desk Microphone
- Many GM300 Accessories (GR300)

## Stay in touch on the move

### R\*1\*C\*K Module Features

- Dip Switch Programmable
- Hang Time 0, 1.5 or 3 seconds
- EIA or Flat Audio
- Bi-Directional or Uni-Directional Operation
- Supports GM300 Accessory Connector
- Front Panel "Repeater Enable Control"
- Variable Level Repeat Audio Path
- Compatible with RapidCall Signalling

### GR300 and GR500 Configuration Options

The following are plug-in modules which replace the R\*1\*C\*K in the standard configuration and continue to provide repeater capability.

#### • ZR310 Multiple Tone Panel

Functions as a community repeater tone panel. Includes a full portfolio of features such as 50 PL and 20 DPL user groups, courtesy tones, squelch tail elimination, high quality repeat audio, sensitive tone decoding and station ID.

#### • i50R Basic Telephone Interconnect

The i50R offers the same features as the proven i50 interconnect, providing maximum system control and highly reliable operations. It allows interconnection with the land-line telephone networks. Standard features include automatic call forwarding, call limit timer, mobile inactivity timer, automatic line leveling and long distance inhibit.

#### • ZR320 Interconnect With Selective Calling

With the addition of the ZR320, the GR300 and GR500 become a single group repeater with full-featured telephone interconnect. These features include selective calling so that any radio can call another specific radio as well as the land-line telephone network, DTMF and Quick-Call II signalling. The ZR320 can operate in simplex (vox) and semi-duplex modes and includes a wide variety of RSS or remotely programmed options.

#### • ZR330 Remote Telephone Interface

The ZR330 is for use in remote areas where a land-line telephone network is not available. It provides telephone service via radio, by supplying an interface between a standard DTMF telephone instrument and a radio. This remote telephone interface requires the use of an additional repeater with the ZR320 at a separate base connected to the land-line telephone network to provide nearly transparent phone operation for rural or emergency applications.

### GR300 and GR500 Applications

#### • Uni-Directional

Allows standard repeater operation, using only one transmitter and one receiver.

**Applications:** Provides added range for portables on widespread construction sites.

#### • Bi-Directional

Allows two groups on different frequency pairs within the same frequency band to communicate.

**Applications:** Temporarily joins two separate groups such as Civil Defence and Fire for emergency relief.

#### • Uni-Directional Cross Band

Allows radios on one frequency band to monitor transmissions from another.

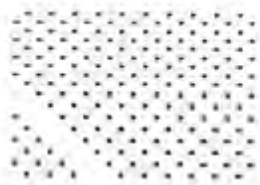
**Applications:** Provides the capability to monitor frequencies such as weather or road condition channels.

#### • Bi-Directional Cross Band

Allows two groups operating within different frequency bands to communicate.

**Application:** Temporarily joins two groups that normally operate on different frequency bands, such as public works and police, for natural disaster situations.





# Radius™

**Motorola: your assurance of quality.**

The Motorola Radius GR300/500 has been developed to offer a high level of durability and operational reliability. Like all of our products, The Motorola Radius GR300/500 has passed the unique Motorola Accelerated Life Test, which simulates five years' use in the field.

Not only that, but the Motorola name itself is a guarantee of trouble free service.

As the world's leading manufacturer of mobile communications equipment, Motorola is dedicated to excellence in its products and level of customer support.

That commitment is shared by Motorola Authorised Re-sellers, who will install and service your system and provide expert advice on the Motorola added extras - a comprehensive range of accessories.

## **SPECIFICATIONS**

### **Frequency Range**

VHF: 136 - 162 MHz  
146 - 174 MHz  
UHF: 403 - 433 MHz  
438 - 470 MHz  
465 - 495 MHz  
490 - 520 MHz

### **Channel Spacing**

12.5 KHz  
20 KHz  
25 KHz

### **Power Output**

VHF: up to 45 W  
UHF: up to 40 W

### **Dimensions (HxWxD)**

265 x 258 x 190 mm (GR300)  
445 x 343 x 190 mm (GR500)

### **Duty Cycle**

GR300: 25 W Continuous  
40/45 W Intermittent  
GR500: 25 W Continuous  
40/45 W 50%

### **Power Supply**

120/240 VAC  
50/60 Hz

**Contact your local Authorised Motorola Radius Re-seller to find out more about how communicating with the GR300 and GR500 will benefit your organisation**

Your Authorised Motorola Radius Re-seller is:



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