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Find the *FreeWave FGBR-115WC* at our website: ***Click HERE***

F-Series*

225-400 MHz FGBR Military Radios



OVERVIEW

The FreeWave Technologies' military products are designed to meet the rigorous demands of military and government users worldwide. The FGBR user-configurable 225-400 MHz product are available in a ruggedized enclosure offer a 9-pin D, 15-pin D, or 11-pin waterproof interface connection. It is can be used in many applications including unmanned airborne and ground systems.

The military products offered by FreeWave Technologies share many of the same features as the non-military products such as high reliable and transmission assurance. These products offer 32 bit CRC error detection, automatic retransmission, up to 153.6 kbps throughput, high speed frequency hopping, and much more.

MODEL	PRODUCT SUMMARY
FGBR-115RA-x	Ruggedized enclosure with 15-pin D interface connection
FGBR-115RC-x	Ruggedized enclosure with 9-pin D interface connection
FGBR-115RG-x	Ruggedized enclosure with 9-pin D interface connection
FGBR-115WA-x	Waterproof enclosure with 11-pin circular interface connection
FGBR-115WC-x	Waterproof enclosure with 11-pin circular interface connection
FGBR-115WR-x	Waterproof enclosure with 11-pin circular interface connection

APPLICATIONS

Government & Defense

KEY FEATURES

- Frequency Hopping Spread Spectrum
- Frequency Hopping Spread Spectrum Technology minimizes detection and unauthorized access
- Noise Immunity for superior performance in noise congested environments
- Range exceeding 60 mile line of sight
- Data encryption using 128 or 256 bit AES
- Error Free Communications with 32 bit CRC with automatic retransmission
- Operating temperature range from –40°C to +75°C
- RF performance tested 100% tested
- Gateway, Endpoint, and Repeater functions all in a single radio
- Various ruggedized and waterproof enclosures
- RS232/RS485/RS422 Interface
- Input voltage range from +9.5 to +30 VDC
- TDMA Available

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225-400 MHz FGBR Military Radios

TRANSMITTER	Frequency Range	225 to 400 MHz
	Output Power	4 Watt (average)
	Range	60 miles Line of Sight
	Waveform	Frequency Hopping Spread Spectrum
	Modulation	2 level GFSK
RECEIVER	Sensitivity	-103 dBm @ BER $1x10^{-6}$
	Selectivity	20 dB at fc +/- 230 kHz
	System Gain	139 dB
DATA TRANSMISSION	Error Detection	32 bit CRC, Retransmit on error
	Data Encryption	Optional 128 and 256 Bit AES
	Maximum Throughput	153.6 kbps
	Data Interface	RS232/RS485/RS422
	RF Connector	N Type Female
	Connector Options	9-pin D, 15-pin D or Fisher 11-pin
	Channel Spacing	230.4 kHz
POWER REQUIREMENTS	Operating Voltage	+9.5 to +30 VDC
	Typical Current (mA)	

Mode	+9.5 VDC	+12 VDC	+30 VDC
Transmit	3.2 A	2.5 A	750 mA
Receive	315 mA	250 mA	100 mA

GENERAL INFORMATION	Operating Temperature	-40°C to +75°C
	Dimensions	165 L x 78 W x 60 H (mm)
	Weight	496 g
	Humidity	0 to 95 % non-condensing

* This device is regulated under the U.S. International Traffic in Arms Regulation (ITAR). These regulations control the Export and Import of the defense articles. The device may only be sold or transferred to a non-U.S. party (in the U.S. or abroad) after authorization is obtained from the U.S. Department of State. Customer (a) agrees to comply with ITAR regulations and (b) shall be responsible for obtaining all necessary U.S. Government authorizations required to ensure compliance with these and other applicable U.S. Laws. Please contact FreeWave for export control information for specific products.

FreeWave Radios Require Professional Installation. Specifications may change at any time without notice. ©2014 FreeWave Technologies, Inc.

FreeWave®

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