



*Trusted RF Solutions™*

## ConvertaWave2™ RF Downconverter

200 - 2500 MHz RF Input  
70 MHz IF Output



P/N: RF200-2500RV1

**The ConvertaWave2™ is a robust broadband RF receiver front end / downconverter with high dynamic range performance from VHF to S-band.**

NuWaves' ConvertaWave2 covers the entire 200 MHz to 2500 MHz frequency range with unmatched precision — 1 Hz tuning resolution — and superior rejection of out-of-band interference. The output of the downconverter is a 70 MHz IF signal that has been band-limited to one of five user-selectable IF bandwidths between 500 kHz and 10 MHz. Custom IF filter bandwidths are also available (consult factory).

The ConvertaWave2 meets the demanding need for high performance RF receivers for applications involving signal exploitation, inclusive of SIGINT, COMINT, ELINT, and RF downconversion for intercept receivers.

### Features

- Broadband Operation
- High Intercept Point
- Low Phase Noise
- 70 MHz IF Output
- User-Selectable IF Bandwidths
- User-Selectable Int/Ext Reference Oscillator
- 1 Hz Tuning Resolution
- Manual and Automatic Gain Control (MGC / AGC)
- 50 dB RF Attenuation
- 50 dB IF Attenuation
- Excellent Out-of-Band Rejection
- Wide Supply Voltage Range
- Simple RS-232 Interface

### Applications

- RF Signal Receivers
- RF Front-End for Tactical Receivers
- Software Defined Radios (SDR)
- Test Bed Developments
- Programmable RF Frequency Conversion
- Waveform Receivers

# ConvertaWave2™ RF Downconverter



## Specifications

### Operational

Frequency Range	200 MHz to 2500 MHz
IF Output	70 MHz
IF Bandwidths	500 KHz, 1 MHz, 1.5 MHz 2 MHz, 10 MHz
IF Rejection	80 dB (min) 100 dB (typ)
Reference Oscillator	Internal/External 10 MHz
Tuning Resolution	1 Hz
Gain	80 dB Typical (Normal Mode) 100 dB Typical (High-Gain Mode)
Supply Voltage	+9 to +16 VDC (+12 VDC Nominal)
Serial Interface	RS-232
Interface Connector	9 pin Micro-D (Socket)
RF Connectors	SMA (Female)
Reference Frequency Connector	SMA (Female)

### Mechanical

Size	7.00" x 4.00" x 1.35" (L x W x H)
Weight	18.6 oz.

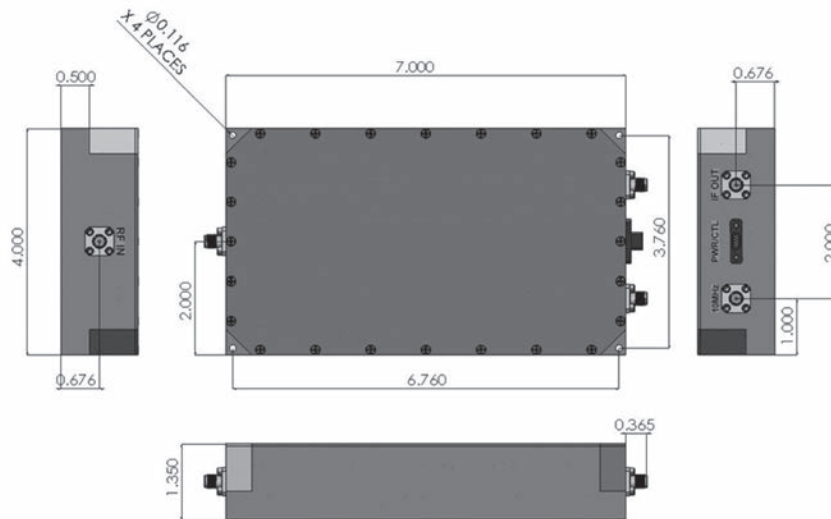
### Environmental

Operating Temperature	-20 to +50 °C
Storage Temperature	-40 to +85 °C

### Export

Classification	ITAR Controlled
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## Mechanical Outline



For information on product disposal (end-of-life), please refer to this document:  
<https://nuwaves.com/wp-content/uploads/Product-Disposal-End-of-Life.pdf>

## Contact NuWaves



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 **NuWaves**  
engineering

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