



NuWaves

RF Solutions

Multi-Octave RF Upconverter (MORF™)



2 - 70 MHz IF Input
2 - 3000 MHz RF Output

P/N: RF2-3000UCV1

NuWaves' Multi-Octave RF Upconverter (MORF™) is a small, wideband IF-to-RF upconverter with variable attenuation control and user-selectable IF bandwidth filtering.

The MORF accepts an IF input signal in the user-programmable range of 2 to 70 MHz, and delivers an RF output at any user-programmable frequency centered between 2 to 3000 MHz. The MORF™ provides the user with 5 kHz tuning resolution, 50 dB of attenuation control over the RF amplitude, and two IF bandwidth options of 4 MHz and 35 MHz.

The MORF is easily configurable via a serial terminal program or an optional graphical user interface (GUI). A development kit that includes the GUI software for the PC Control Panel, +6 VDC power supply, and a custom serial interface cable is available as an ordering option.

Features

- Small Form Factor
- Broadband Coverage
- Programmable IF Input
- Programmable RF Output
- 5 kHz Tuning Resolution
- User-Selectable Attenuation Control
- User-Selectable IF Bandwidths
- Large Dynamic IF Range
- Accepts Modulated Input
- Simple RS-232 Interface

Applications

- RF Signal Generation
- Software Defined Radios (SDR)
- Test Bed Developments
- Programmable RF Frequency Conversion
- Waveform Generators

MORF™ RF Upconverter

Specifications



Operational

IF Input Frequency Range	2 MHz to 70 MHz
RF Output Frequency Range	2 MHz to 3000 MHz
Frequency Step Size	5 kHz
IF Bandwidth (User-Selectable)	4 MHz or 35 MHz
IF Rejection	30 dB
Output P1dB	+8 dBm
Output Spurious	-30 dBc (typ)
Reference Oscillator (User-Selectable)	Internal/External 10 MHz
Supply Voltage	+6 VDC
Current Consumption	600 mA @ +6 VDC (typ)
Serial Interface	RS-232
Interface Connector	9 pin Micro-D (Socket)
RF Connectors	SMA (Female)

Mechanical

Size	3.50" x 2.50" x 1.00" (L x W x H)
Weight	7.4 oz.

Environmental

Operating Temperature	-15 to +50 °C
Storage Temperature	-40 to +85 °C

Export

Classification	ITAR Controlled
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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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