



Trusted RF Solutions™

HiPerTuner™ Broadband Preselector

200 - 2500 MHz



P/N: RF200-2500TUNV1

NuWaves' HiPerTuner™ is a premier high-performance, wideband RF Preselector designed for front-end receiver and transmit applications where stringent RF filtering of the signal of interest is required with superb out-of-band rejection.

The HiPerTuner operates over a frequency range of 200 to 2500 MHz and is digitally controlled by a simple RS-232 interface. The user can configure the tuner for frequency of operation and RF gain. The RF output is a filtered version of the RF input (i.e. no downconversion or upconversion).

The HiPerTuner boasts 1 MHz of frequency tuning resolution allowing selectivity for various applications.

Features

- 200 to 2500 MHz
- Small Form Factor
- 4% to 8% Bandwidth (typ)
- 1 MHz Center Frequency Resolution
- 45 dB of Gain Control in 1 dB Steps
- Sleep Mode
- Triple Cascade of Varactor-Tuned Filters
- Processor Control with Clock Dithering
- Configuration Storage

Applications

- Front-end Filtering for Strong Out-of-Band Interferers
- RF Front-end Gain Leveling System
- Software Defined Radios (SDR) RF Filtering
- Test Bed Developments
- High Dynamic Range Pre-Selector for Receiver Applications
- Co-site Radio Performance Improvement
- Transmit Exciter or Pre-Exciter Filtering for Broadband and Narrow-Band Transmitter Applications

HiPerTuner™ Broadband Preselector



Specifications

Operational

Frequency Range	200 MHz to 2500 MHz
Noise Figure	6 dB (typ)
Bandwidth	4% to 8% (typ)
Gain Control	45 dB in 1 dB Steps
Tuning Resolution	1 MHz
OIP3	+11 dBm (typ)
VSWR In/Out	<1.9:1 (typ)
Supply Voltage	+9 to +16 VDC (+12 VDC Nominal)
Current Consumption	150 mA @ 12VDC (typ)
Serial Interface	RS-232
Interface Connector	9 pin Micro-D (Socket)
RF Connectors	SMA (Female)

Mechanical

Size	6.50" x 4.00" x 0.75" (L x W x H)
Weight	11.3 oz.

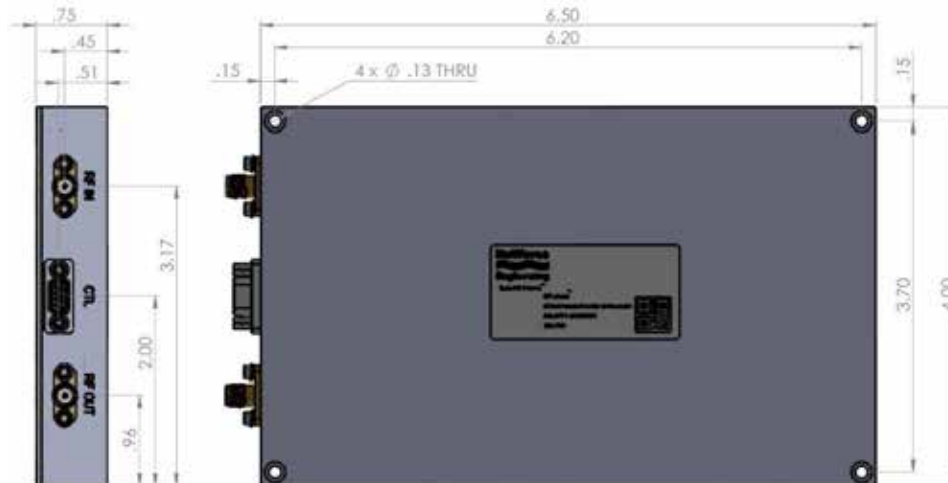
Environmental

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

Export

Classification	ITAR Controlled
----------------	-----------------

Mechanical Outline



Contact NuWaves



NuWaves Engineering
132 Edison Drive
Middletown, OH 45044

www.nuwaves.com
product.sales@nuwaves.com
513.360.0800

 **NuWaves**
engineering
Trusted RF Solutions™