

NuWaves

RF Solutions

HiPerTuner™ Broadband Preselector

200 MHz - 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.

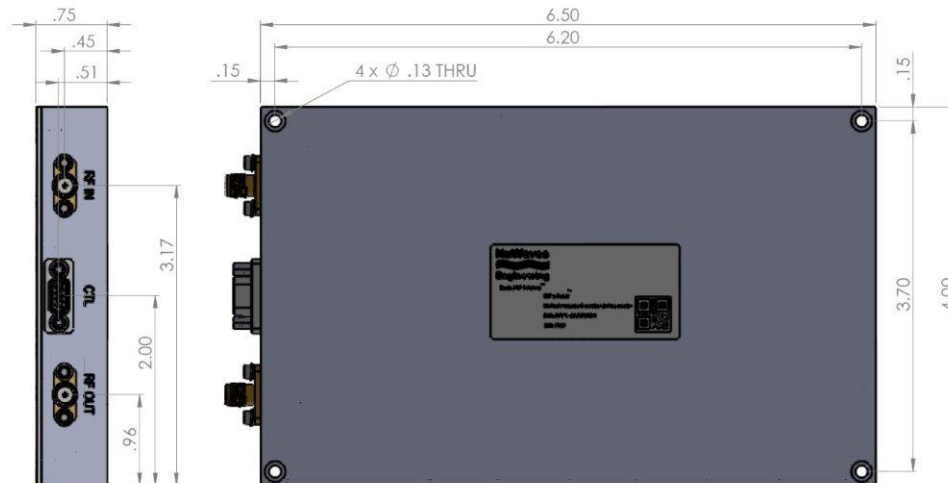
Environmental

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

Export

Classification	ITAR Controlled
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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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