



NuWaves

RF Solutions

ConvertaWaveLite™ RF Downconverter

1010 - 1100 MHz RF Input
70 MHz IF Output

P/N: RF1010-1100DCV1-C01-S01

The ConvertaWaveLite™ is a robust broadband RF receiver front end / downconverter with high dynamic range performance for L-band.

The ConvertaWaveLite™ covers the RF frequency range of 1010 MHz to 1100 MHz 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 40 MHz.

The ConvertaWaveLite™ meets the demanding need for high performance receivers for applications involving Safety of Life Radio Navigation, IFF, TCAS, ADS-B and many other RF downconversion applications.



Features

- Broadband Operation
- High Intercept Point
- Low Phase Noise
- 70 MHz IF Output
- 40 MHz IF Bandwidth
- 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

- Safety of Life Radio Navigation
- IFF, TCAS & ADS-B
- RF Signal Receivers
- RF Front-End for Tactical Receivers
- Software Defined Radios (SDR)
- Test Bed Developments
- Programmable RF Frequency Conversion
- Waveform Receivers

ConvertaWaveLite™ RF Downconverter

Specifications

Operational

Frequency Range	1010 MHz to 1100 MHz
IF Output	70 MHz
IF Bandwidth	40 MHz
IF Rejection	80 dB (min) 100 dB (typ)
Reference Oscillator	Internal/External 10 MHz
Tuning Resolution	1 Hz
Gain (User Selectable)	+10 dB Typical (Normal Mode) +30 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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Regulatory

Classification	REACH & RoHS Compliant
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Contact NuWaves



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