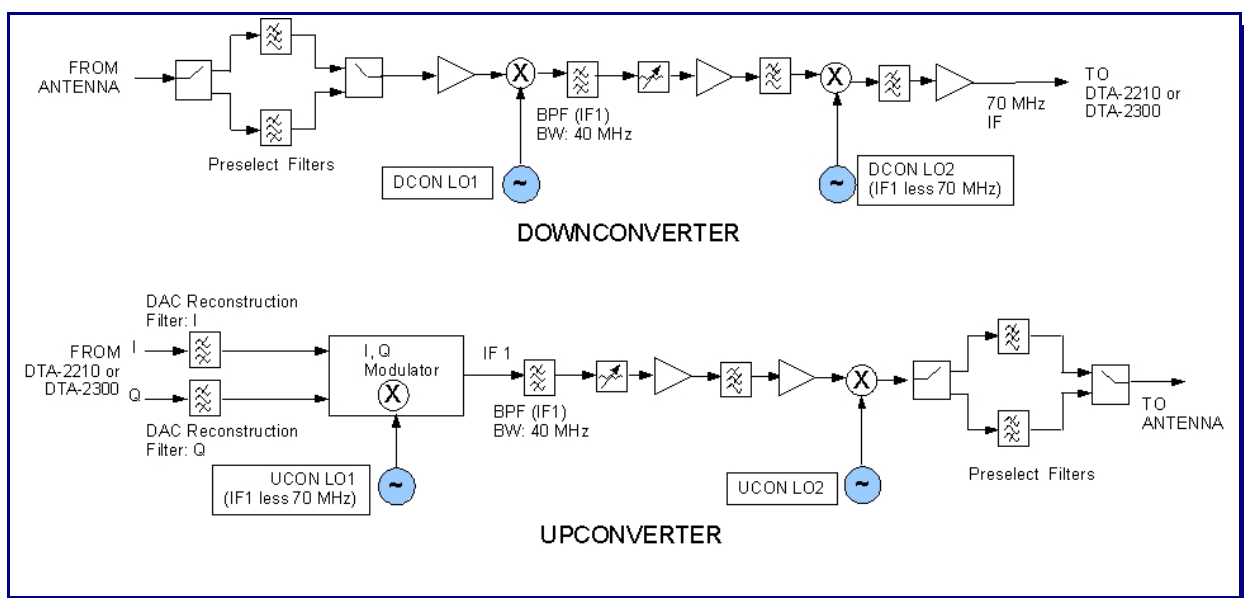


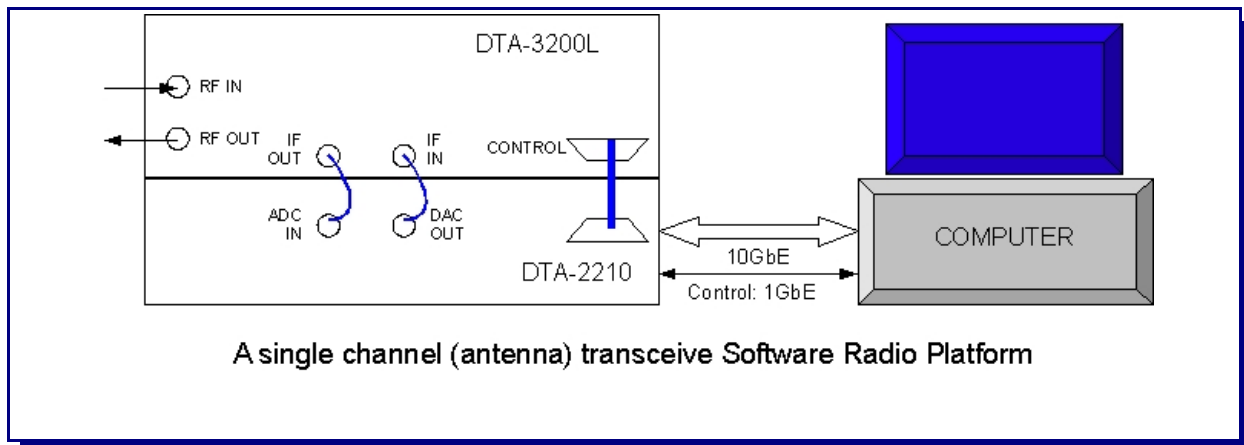
DTA-3200L: 1GHz Tunable RF Transceiver

The DTA-3200L is a low cost RF up and down converter covering up to 1000 MHz and is ideally suited for radio communications, SIGINT and distributed TDOA applications. It offers an instantaneous bandwidth of 40 MHz and operates seamlessly with the DTA-2210 or the DTA-2300 Digital IF transceiver products. The DTA-3200L is available as a 1U high 19" rackmountable system.



The RF down converter allows the user to directly connect to the antenna and obtain a frequency coverage of 20 to 1000 MHz. The IF output is at 70 MHz and the IF can be digitized by the DTA-2210 or the DTA-2300 Digital IF processor. The RF up converter allows the user to generate a RF signal with up to 40 MHz bandwidth anywhere in the 20 to 1000 MHz band. The RF up converter accepts a complex IF input at 70MHz. The user may also drive the unit with a real IF signal and terminate the other input. The IF signals may be very easily generated with the DTA-2210 or the DTA-2300. The DTA-3200L uses a modular design and is based on extensive design reuse with other members of the DTA-3200 product family.

The DTA-3200L can be controlled via an SPI bus. A full source code C API and demo code is available that is integrated with the DTA-2210 or the DTA-2300 API.



Features:

Receive (Down Conversion):

- Coverage: 20 to 1000 MHz
- Single channel (synchronized multi channel available as option)
- Instantaneous BW: 40 MHz (Other BWs optional)
- Tuning step: 500 kHz
- Phase Noise: -98 dBc/Hz @ 1kHz
- Image Reject: 60 dB
- IF Out: 70 MHz (other IFs optional)
- Noise Figure: 10 dB
- Spurious: <-60 dBc
- Gain Control: 30 dB in 1dB steps
- IP3 (Min Gain): +5 dBm
- Input power (no damage): +20 dBm
- Input power (no saturation): -20 dBm
- Custom preselect filters available as option

Transmit (Up Conversion):

- Coverage: 20 to 1000 MHz
- Single channel (synchronized multi channel

available as option)

- Instantaneous BW: 40 MHz (Other BWs optional)
- Tuning step: 500 kHz
- Phase Noise: -95 dBc/Hz @ 1kHz
- Image Reject: 60 dB
- IF Out: 70 MHz (other IFs optional)
- Complex (I,Q) IF in
- Harmonics: <-60 dBc
- Output level: -10 dBm
- Custom output filters available as option

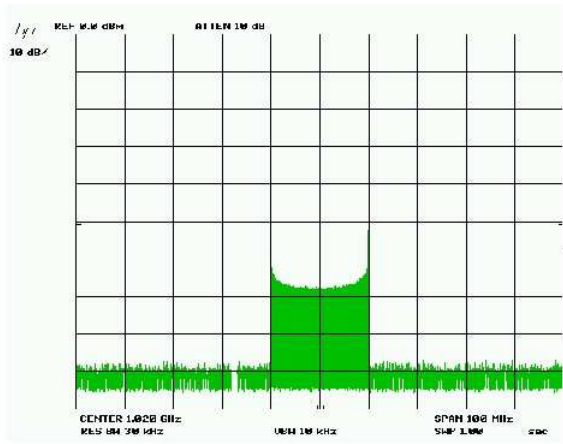
Other:

- Tuning speed: < 3 ms (excluding application software delays)
- Control Interface: SPI
- Directly connects to the DTA-2210 or the DTA-2300 for Network interface
- C code API and example code available for control
- 19" enclosure, 1U high, 18.5" deep
- AC 110V/220V

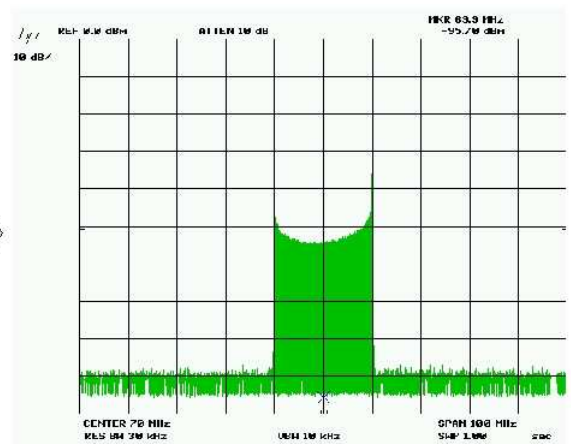
Customized Solution

DTA-3290L can be easily customized for other bandwidth options, IF options, transmit power, preselect filters, output filters, etc. D-TA Systems offers custom RF design services. Please contact factory (sales@d-ta.com) to discuss your specific requirements.

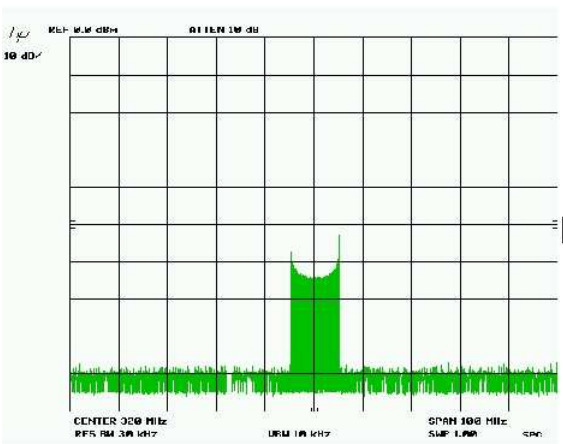
DTA-3200L Down Converter Performance Plots



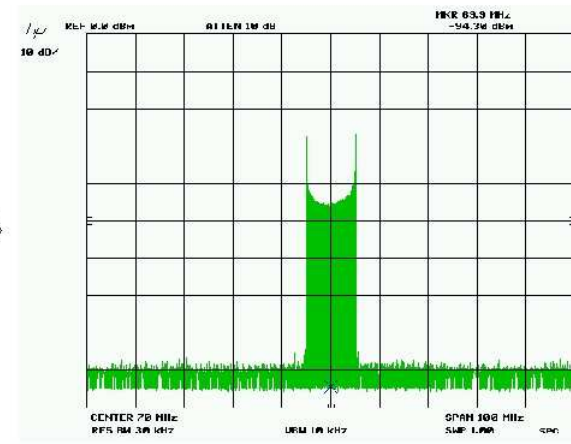
RF in at 1020 MHz (FM with -40dBm)



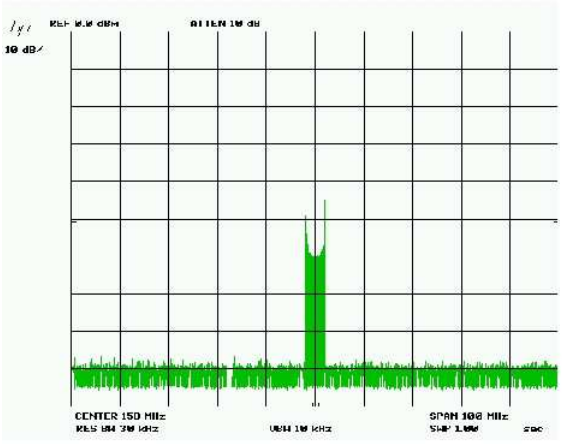
IF out at 70MHz



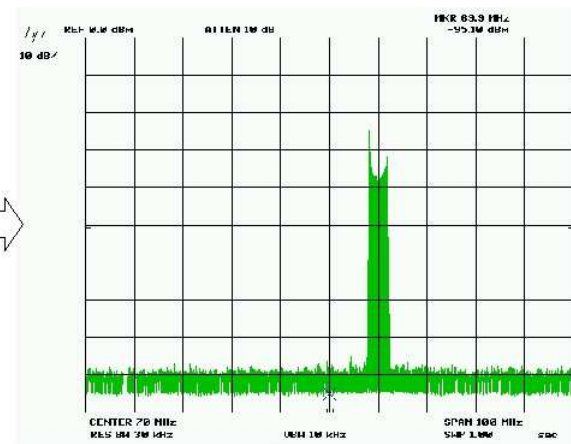
RF in at 320 MHz (FM with -40dBm)



IF out at 70MHz

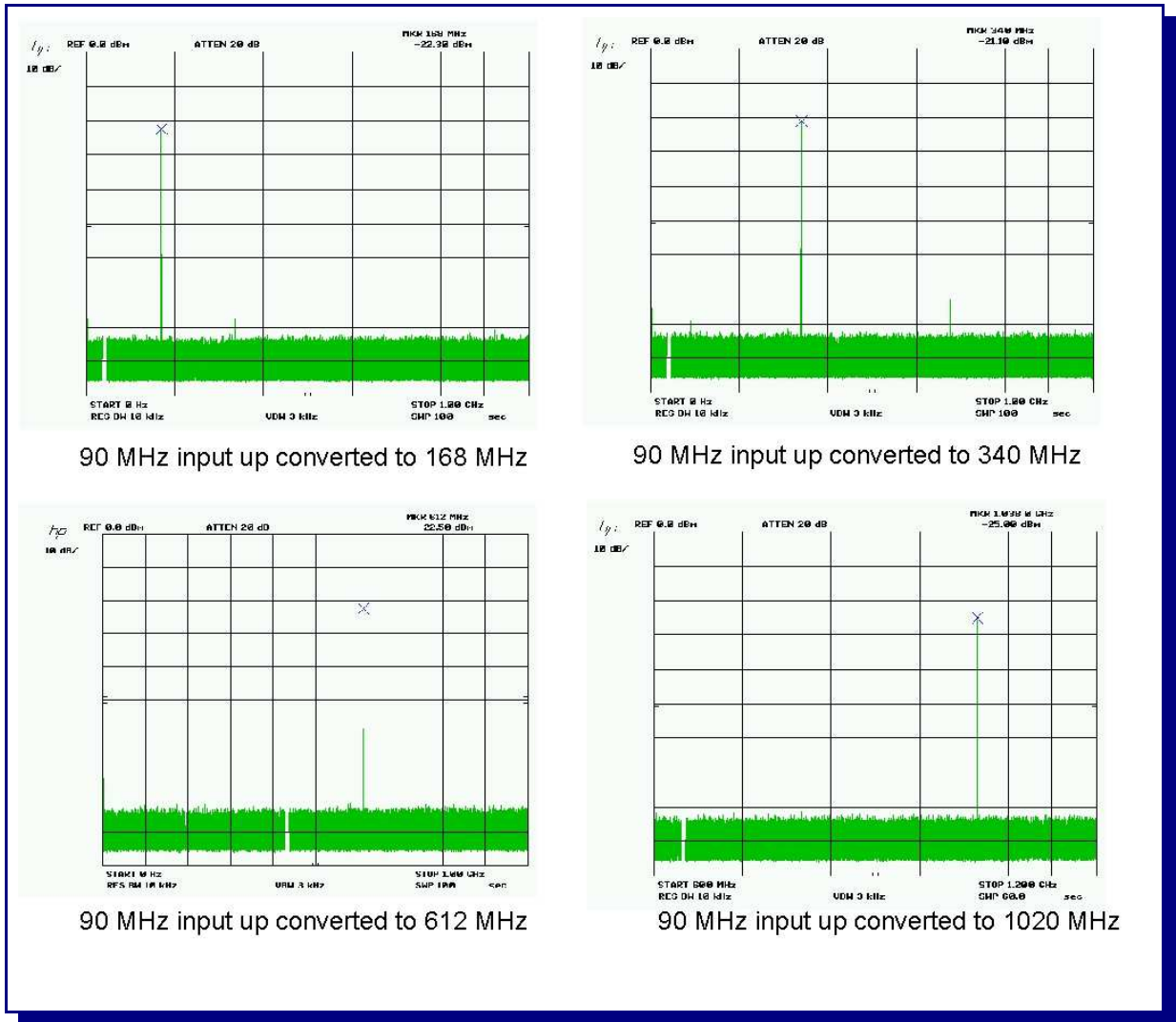


RF in at 150 MHz (FM with -40dBm)



IF out at 70MHz

DTA-3200L Up Converter Performance Plots



Ordering Information

DTA-3200L-00070-01-01: Single channel 1GHz RF to IF up and down converter

API-3200L: API for DTA-3200L

CBL-3200L-2210: Control cable to connect DTA-3200L to DTA-2210

Contact factory for synchronized multi-channel, customization options and custom RF design services.

Contact Information

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A SENSOR INTERFACE AND PROCESSING INTERFACE COMPANY