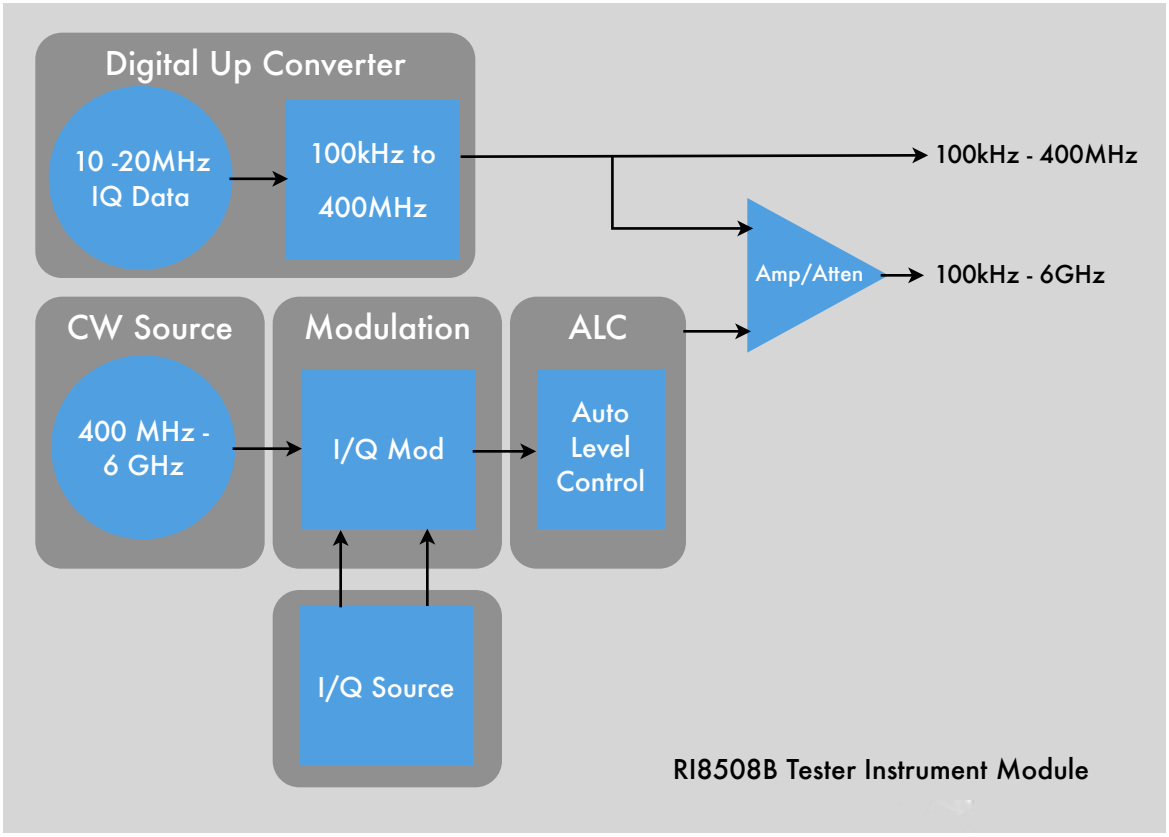
Tester Instrument Module Brief



RI8508B 6GHz I/Q Modulated Source and DDS

Dual Range Modulated Source

The RI8508B provides two bands of operation, with built in modulation sources for each band.

The lower band covers center frequencies from 100kHz to 400MHz over 100 dB of usable dynamic range. This band features a Quadrature Digital Upconverter (QDUC) architecture providing universal modulation coverage for communication device testing including WCDMA and EVM tests with up to 2.5Msymbols /s QPSK capability.

The upper band is handled by a combination of an RI exclusive CW Source covering 400MHz to 6GHz and I/Q Modulation provided by an onboard 800Msps IQ AWG with built in gain, phase and offset compensation. The IQ source features 14 bit performance with sinx/x compensation. This is a perfect fit for testing broadband communication, wireless base station, internet telephony, and video modem devices.

On board switching provides single port access to the complete 100kHz to 6GHz range.

Contact sales@roos.com for more information.

Key Specifications

- ➡ Full Vector Signal Generation with complex modulation
- ➡ High symbol rate EVM testing
- ➡ Better than 100 dB of usable dynamic range
- ➡ Microsecond Frequency Hopping in CW Mode

RI8508B Applications

- Functional EVM Test
- FM Stereo Radio
- WCDMA
- CDMA2000
- WiMax
- TD-SCDMA
- GSM
- ACLR
- HD Radio
- OFDM
- Power Line Networking
- Ultra Wideband
- 3G/4G Cellular
- Wireless base station
- Broadband communications
- VOIP
- Hybrid Fiber Coaxial Data
- Local Multipoint Distribution (LMDS)
- Point - to - Point
- Bluetooth

TIM Level Performance Data

QDUC Specifications

Minimum RF Frequency	100kHz
Maximum RF Frequency	400MHz
Frequency Accuracy	Same as system timebase*
Minimum Power	-100dBm
Maximum Power	+10dBm
Modulation Frequency Resolution	0.003% of setting
Modulation Frequency Accuracy	Same as system time base*
Switching Time	100µS
Harmonics	
Even	-20dBc Typical
Odd	-10dBc Typical
Modulation Waveforms	Sine (FM), Tone (SSB), User Defined

I/Q Modulated Source Specifications

Minimum RF Frequency	400MHz
Maximum RF Frequency	6GHz
Frequency Accuracy	Same as system timebase*
Minimum Power	-100dBm
Maximum Power CW	+24dBm
Maximum Power Modulation	+14dBm
Modulation Frequency Resolution	0.003% of setting
Modulation Frequency Accuracy	Same as system time base*
Switching Time	100µS
Harmonics	-20dBc Typical

** All time bases for system components are synchronized. Internal time base accuracy is ±1 ppm variation from 10 to 30 degrees C and ±5 ppm absolute accuracy.*

Mechanical Specifications

Single TIM Unit
Weight: 7 lbs
TIM Block Type: 16 Coax
TIM Blindmate Contact Force: 7.5 lbs

Cassini Test Systems

A Complete High Speed Automated and Integrated Test Solution for all types of communications and mixed signal devices.

Cassini test systems consist of a simple base system providing computer, power, software and docking capabilities.

Additional test capability needed for virtually any type of IC, Wafer, or Module can be configured via Tester Instrument Modules (TIMS) that plug into the Test Head plate.

Each TIM contains its own cooling, signal distribution and blind mate interface suited to its application.

The result is the ability to configure a Cassini for any application with almost no system overhead. This is equally true for low pin count as well as high pin count test requirements

ROOS INSTRUMENTS, INC.
2285 MARTIN AVE
SANTA CLARA, CA 95050

+1-408-748-8589 PHONE
+1-408-748-8595 FAX

sales@roos.com
www.roos.com