

WBT-3202[®]

Self-Contained Software Defined Radio Platform (SDRP)
for Radio Frequency Capture and Playback

Capturing up to 320 MHz of RF Spectrum from 50 MHz to 18 GHz

The WBT-3202 is a fully self-contained RF capture and playback system. The WBT-3202 is capable of capturing up to 320 MHz of spectrum between 50 MHz and 18 GHz utilizing dual independent or phase coherent transceivers and then replaying that captured RF for later processing.

The WBT-3202 is equipped with internal preselection filters, mitigating out of band interference. Combined with FPGAs the WBT is capable of advanced signals processing as well as interference analysis and mitigation applications. This becomes especially useful as the deployment of 5G and other emerging commercial applications are impacting spectrum use. Commercial band plans are becoming more complex with expected frequency usage extending beyond 40 GHz. The rugged design and ability to be powered from multiple sources, lends to its flexibility and capability to operate from several platforms in a multitude of environments.

The WBT catches what real time tools miss. Capturing and preserving a faithful replica of the RF environment that can be played back into any system with an RF input. The rugged design lends to its flexibility and capability to operate from several platforms in a multitude of environments.

The WBT's wide tunable range allows for the capture, replay and analysis of nearly all cellular, navigation, satellite, television, handheld transceivers as well as manned and unmanned vehicle communications.



Features

- Independently tuned or phase coherent transceivers
- 50 MHz to 18 GHz
- 320 MHz instantaneous bandwidth
- FPGA support
- Internal RF filtering
- Removeable media

Applications

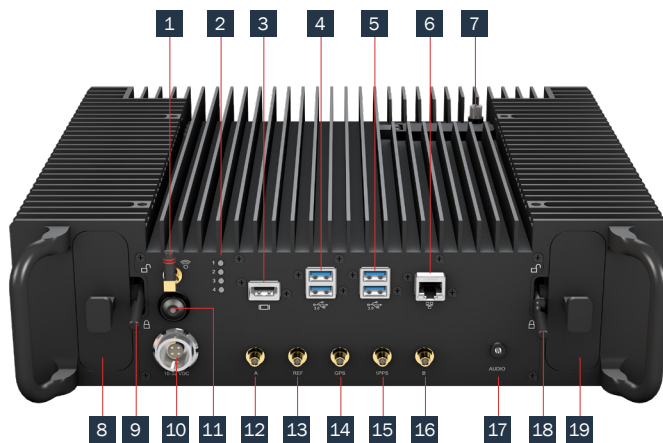
- RF signal recording and playback
- Signal analysis
- Interference analysis
- Remote spectrum monitoring
- Training
- Receiver test and design
- Spectrum allocation



This item is subject to the EAR. Accordingly, an export authorization may be required for certain clients, uses, and/or destinations. The time required to obtain an authorization may impact international delivery.

QRC Technologies - A Parsons Company / Sales

Direct: +1 540.446.2270 / Fax: +1 540.548.4080 / 1191 Central Park Boulevard, Fredericksburg, Virginia 22401 / qrctech.com



No.	Description
1	Wi-Fi/Bluetooth SMA
2	LED 1&2 Tuner Status
3	LED 3&4 Disk Status
4	HDMI Port
5	Dual USB 3.0
6	Dual USB 3.0
7	1 Gb Ethernet
8	CFAST OS Card Slot
9	Hard Drive Expansion Module Locking Lever

No.	Description
10	Power Connector
11	Power Button
12	Tuner A Rx/Tx SMA
13	10 MHz Reference
14	GPS SMA
15	1PPS SMA
16	Tuner A Rx/Tx SMA
17	3.5 mm Audio Jack
18	Expansion Module Locking Lever
19	Hard Drive Expansion Module

Technical Data: WBT-3202

Receiver Type	Super Heterodyne
Number of Transceiver Channels	2
Channel Instantaneous Bandwidth (IBW)	160 MHz
System Instantaneous Bandwidth	320 MHz
Frequency Range	50 MHz to 18 GHz
Phase Coherency	Phase Coherent or Independent
Instantaneous Dynamic Range	96 dB
Preselection Filtering	Sub-Octave filtering (500-20000 MHz)
Signal Processing	FPGA
Internal Reference Clock Stability	+/- 1 ppb using GPSDO-conditioned OCXO
Internal 1 PPS Accuracy	+/- 12.5 nsec with GPS lock
Processor	i7 QUAD Core, 32 GB RAM
Operating System	Linux
Storage	(1) NVMe U.2 removable drive (15 TB) included
Sampling Rate	200 MS/s
I/O	GbE, USB 3.0, 1 PPS, 20 MHz Reference
Dimensions	13.25" W x 4.25" H x 13" L
Weight	18.8 lbs.
Power Consumption	120 W (typical)
DC Input Voltage	10-32 VDC
Operating Temperature	-10 to 45 °C
Data File Format	VITA 49

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