RINCON RESEARCH
EMPLOYEE OWNED

MBRA2-16T-RFXR

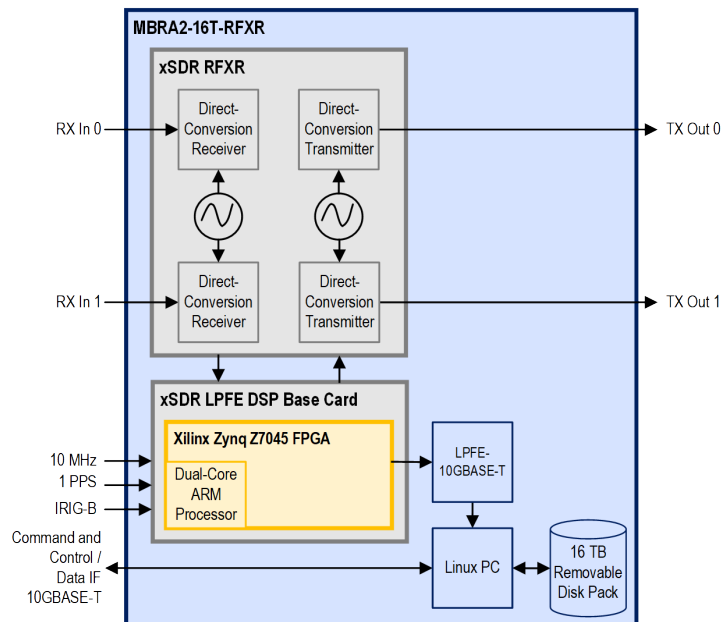# MBRA2-16T-RFXR
MOUNTAINBRIK™ RAID AND SIGNAL ACQUISITION

- Save the entire 105 MHz input bandwidth to disk for more than 21 hours
- Record at rates of up to 210 MByte/sec in a single shot or in looped mode for indefinite recording duration
- Quickly and easily swap the six removable, 16 TB, solid-state disk pack for additional data storage
- Ascertain system health at a glance using the intuitive, web-based control interface
- Transport the system in a rugged, lightweight, Pelican case

THE MOUNTAINBRIK™ RAID AND ACQUISITION, 2ND GENERATION (MBRA2) SYSTEM, is a portable, high-speed RAID storage solution with integrated signal acquisition from 70 MHz to 6 GHz.

RECORDINGS CAN BE DONE IN SINGLE SHOT OR LOOPED MODE. In looped mode, new data overwrites older data for indefinite recording duration. The removable 16 TB, solid-state disk pack facilitates easy drive swaps in the field for additional storage.

MBRA2 SYSTEMS HAVE TWO INDEPENDENT INPUTS THAT CAN BE USED SIMULTANEOUSLY. They also include two independent sub-band tuners that can be deployed on either of the input channels. The sub-band tuners support output bandwidths from 21 kHz to 42 MHz. An intuitive Java-based command and control interface supports operation using Windows, OS X, and Linux platforms.

WITH THE RECORDED DATA PLAYBACK FEATURE, you can reproduce an analog output of recorded data streams. Recorded data is time-tagged when the system is connected to external time/frequency sources.

MOUNTAINBRIK™ GUI

Simple, powerful controls for setting the tuners to either of the system ADC inputs and adjusting the bandwidth and frequency.

Start and stop recordings with ease.

Clear system health and status indicators.

Real-time spectral plots and waterfalls enable the user to quickly analyze a dynamic signal environment.

SPECIFICATIONS

GENERAL

- Processor: Core i7-2600
- RAM: 32 GB
- Disk Space: Up to 16 TB with support for RAID 0, 5, or 6
- Control Panel: 4-line LCD
- Max Record Rate: 490 MByte/sec
- Data Acquisition: xSDR with IFXR, developed by RRC

INPUT/OUTPUT

- Network: 10GBASE-T command and control port
- Peripherals: USB 3.0 (with security door), eSATA, VGA
- Analog Inputs: Dual, common LO and clock, 0.250 MSPS to 61.44 MSPS, 12-bit ADC, 70 MHz to 6000 GHz bandwidth, -24 dBm, full-scale
- Input Filters: 4-band preselector
- Analog Outputs: Dual, 70 MHz to 6 GHz, common LO and clock, 0.250 MSPS to 61.44 MSPS, locked to ADC sample clock, 12-bit DAC, 56 MHz bandwidth (max), +4 dBm, full-scale (max)
- External Ref.: 0.2 Vpp to 10 Vpp, -10 dBm to +24 dBm, AC-coupled, 10 MHz only
- 1 PPS: 50 Ω standard, Hi-Z ordering option
- Time: NTP or NMEA-0183 (RS-232, LEMO Connector)

PHYSICAL

- Dimensions: 16.4" x 8.8" x 13.3" Pelican case
- Input Power: 100/220 V, 50/60 Hz
- Power Consumption: 250 W, approximate
- Analog/RF Connectors: SMA, 50 Ω
- Multi-Unit Synchronization: With external clock connections
- Ambient Operating Temperature: 0° C to 45° C
- Time-Tag Accuracy: Within 2 ns using 1 PPS and external 10 MHz reference

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