## **FEATURES**

- 8-Channel Wideband Digital Tuner
- 20 MHz to 6000 MHz frequency coverage
- Phase coherent or independent tuning
- 40 MHz bandwidth, per channel
- Dual 1 Gigabit Ethernet or Dual 10 Gigabit
  Ethernet data outputs options
- 10/100 Ethernet Control
- 8"W x 1.9"H x 12"D, 6.5 lbs., 47 W
- Software tools and API for easy integration

- Internal Xilinx Kintex 7 FPGA-based signal processing with:
  - 100 independently tuned DDRs with selectable demodulation bandwidths (2 KHz, 3.5 kHz , 5 kHz, 10 kHz, 20 kHz, 50 kHz, 100 kHZ and 200 kHz)
  - AM, FM, USB, LSB and CW Demodulation
  - BFO available when in CW mode (Range: -4000 to +4000 Hz)
  - ALC: Audio Automation Level Control
  - Wideband Spectral Data
  - Digital Audio at 8 kHz 16-bit linear in real format
  - Squelch level control (Range: -150 to +20 dBm)

**NDR328** 8-Channel General Purpose Receiver

## DESCRIPTION

The NDR328 is an affordable standalone 8-Channel general purpose receiver that converts the VHF/UHF spectrum to digital IF (I/Q) data over dual 1 Gigabit Ethernet or 10 Gigabit Ethernet interfaces. The NDR328 includes 8 independent tuners that each cover the 20 to 6000 MHz frequency range with a 40 MHz instantaneous bandwidth totaling 320 MHz of collection bandwidth. The FPGA processing is designed to allow 100 independently tuned digital drop receivers (DDRs) to be placed anywhere along the 320 MHz collection bandwidth. Each independent DDR has a selectable demodulation bandwidth, demodulation type, BFO, ALC or Squelch, automatic or manual gain control. Either digital audio with audio AGC or digital IF data for each DDR is available as output over the data port. The output over the data port has the flexibility to independently route channels to selectable network destinations. Wideband spectral data for each channel at 40 MHz bandwidth each is available over data port.

The NDR328 is packaged in a rugged aluminum chassis that provides RF shielding, thermal management, and protection suitable for harsh environments. Consult factory for alternative DDR configurations or output requirements.

## **APPLICATIONS**

- Narrowband Signal Processing
- Radio Receiver Systems
- Spectrum Monitoring Systems
- Test and Training Systems

