

FEATURES

- 20 MHz to 18 GHz frequency coverage
- 500 MHz BW
- Additional supported BWs: 320 MHz, 250 MHz, 160 MHz, 100 MHz & 80 MHz
- 14-bit internal ADC, 1344 Msps
- 1 GHz analog IF Output

FEATURES

- Full bandwidth Digital IF Output over 40 Gigabit Ethernet
- Internal FPGA-based signal processing with variable rate DDCs
- Gigabit Ethernet command and control
- Time-tagged Digital IF output (based on 1PPS input)

NDR562

20 MHz to 18 GHz

Wideband Digital Tuner

DESCRIPTION

The NDR562 wideband digital tuner is a super-heterodyne downconverter that covers RF and Microwave signals from 20 MHz to 18 GHz. The tuner has a 1 GHz analog IF output with selectable bandwidths of 500 MHz, 320 MHz and 200 MHz. An integrated high dynamic range 14-bit Analog-to-Digital converter (ADC) is utilized to digitize a 500 MHz wide IF at a 1344 Msps sample rate. An onboard Kintex UltraScale series FPGA is used for the channelizer, the VITA-49 formatter, data multiplexer and the 40 Gigabit Ethernet Digital IF data interface. The Digital IF output supports bandwidths of 80 MHz, 100 MHz, 160 MHz, 250 MHz, 320 MHz and 500 MHz.



An internal ARM A8 microprocessor running embedded LINUX is used for command/control of the unit via an Ethernet interface and power is derived from a 115 VAC external power supply input (power consumption is 100 Watts). The unit is housed in a 1U, 19 inch equipment frame with 19"x18"x1.75" overall dimensions that provides RF shielding, thermal management, and protection suitable for harsh environments.