

## DRT4001- Software Defined Radio Family

*Elements for a Reconfigurable Communications System*

### DESCRIPTION

The DRT4001 family is an advanced collection of software defined radio (SDR) components available as modular 3U CompactPCI units. Wide frequency coverage and powerful signal processing elements combine to form capability for a wide variety of communication applications. The small form factor and flexible architecture can be tailored to meet the diverse needs for developers of software defined radio solutions.

- 20 MHz to 3 GHz frequency coverage for receive and transmit applications.
- High dynamic range with wide instantaneous bandwidths for high channel capacity.
- Units controlled via standard 32-bit CompactPCI interface.
- Scalable architecture allows for increased bandwidth or increased communications channel capacity through selection of radio components.
- Units constructed as single-wide 3U CompactPCI form factor modules for compact, yet powerful components for state of the art communications.
- Wideband tuning architecture allows for coverage of arbitrary bands of interest for the most flexibility in defining a particular communications application.
- Performance and quality of DRT advanced engineering for the most performance with the highest of reliability.
- Powerful, high capacity, digital signal processing combined with digital radio for robust, adaptable, and upgradeable software applications.

## Members of the 4001 SDR Family



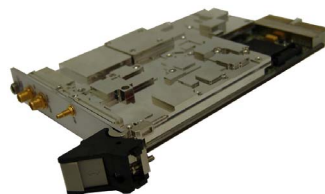
### ***DRT 4082 Equipment Frame:***

19" rack-mount equipment frame has flexible digital IF data routing capability and holds up to 12 tuners/exciter along with Reference and Controller modules.



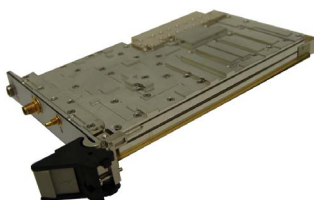
### ***DRT 4072 Controller Unit:***

Full-functioning Pentium PC in a CompactPCI card that controls the internal circuitry of the DRT4001.



### ***DRT 4051 Digital Radio Reference Unit:***

Generates system frequencies and timing standards for operation of multiple software defined radio and processor units.



### ***DRT 4011 Wideband Tuner Unit:***

High dynamic range, fast-tuning digital tuner that covers the frequency range of 20 MHz to 3 GHz.



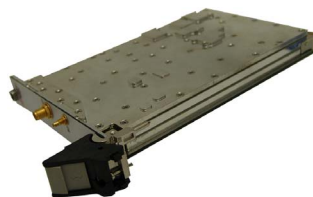
### ***DRT 4021 Digital Receiver Unit:***

Digital signal processor unit that operates on wideband digital IF signals, producing narrowband IF data streams for further processing and demodulation.



### ***DRT 4022 Digital Modulator Unit:***

Digital signal processor unit that generates multi-channel wideband digital IF signals from narrowband IF data streams through modulation.



### ***DRT 4041 Wideband Exciter Unit:***

Translates a wideband digital IF to an output frequency range between 20 MHz and 3 GHz.

Contact DRT today to find how our radio solutions can help you meet your communications needs.

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