

## DRT4003- Synthetic Instrumentation Family

*Flexible Test Solutions based on Software Defined Radio*

### DESCRIPTION

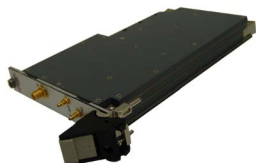
The DRT4003 family is an advanced collection of Synthetic Instrumentation (SI) components available as modular 3U CompactPCI/PXI units. Highly integrated wideband digital radio coupled with advanced digital signal processing capability provides a variety of test instrumentation solutions through software defined radio techniques. The small form factor and flexible architecture can be tailored to meet the diverse needs for developers of RF, communications, and electronics test solutions.

- 20 MHz to 3 GHz frequency coverage for RF test applications.
- High dynamic range for diverse measurement needs.
- Units controlled via standard 32-bit CompactPCI/PXI interface.
- Scalable architecture allows for inclusion with other types of synthetic instruments for sophisticated test solutions.
- Units constructed as single-wide 3U CompactPCI/PXI form factor modules for compact, yet powerful RF test elements.
- Analysis and signal sourcing for flexibility of RF testing needs.
- 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.

The One  
Measure for  
Wireless  
Performance

## Members of the 4003 Synthetic Instrument Family

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### ***DRT 4031 Synthetic RF Signal Analyzer:***

30 MHz to 3000 MHz RF signal digitizer coupled with advanced ADC and signal processing capability for RF analysis applications.



### ***DRT 4032 Synthetic RF Signal Source:***

30 MHz to 3000 MHz digital RF source coupled with advanced DAC and signal processing capability for arbitrary generation and modulation.

## Applications

Synthetic Instrumentation (SI) makes use of abstracted test equipment capability through DRT's digital radio technologies based on Software Designed Radio (SDR) techniques. The combination of RF sense and source capability in the 4003 family brings the potential of advanced RF test solutions through software application development.

- Spectrum analysis
- Vector signal analysis
- Network analysis
- Signal generation
- Distortion and noise impairments
- Bit error rate measurements
- Channel simulations
- Other applications definable with software

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