

Portable Tactical Radio Reconnaissance Product Line General Description

Key Features

- Portable PC with 3U cPCI chassis
- High Performance V/UHF Receivers
- Direct Conversion HF Receiver (optional)
- High Speed A/D Input card with on-board FPGA
- Processing Modules for automatic detection and processing of PMR, LRCT (HPCP), cellular, etc.
- Spectral Scanning
- Tunable DDC receivers for monitoring and recording of narrowband signals
- Full RF Spectrum Search
- Storage Capacity
 - Up to 150 hours storage of digitized narrowband data (1.25 MHz max. BW)

The TriaSys Technologies RForce Product Line provides the effective solution for portable investigation and surveillance of the Radio Frequency (RF) environment. RForce combines COTS hardware with intuitive user interfaces, to provide an affordable package with easy setup and effective operation. With flexibility in mind, RForce integrates modularity, expandability and mobility into the system architecture. RForce can not only be easily configured to a customer's specific requirements, but it can also be expanded at any time, and readily reconfigured, even in the field.

The flexibility of the system makes RForce truly mobile, enabling fast, easy deployment. RForce is equally suited in any situation, from a static HQ, to a mobile command center, to a tactical vehicle, or even a rental van. The system requires less than 400 watts steady state AC power - easily converted from vehicle 12VDC with a standard commercial inverter.



RForce System Console

RForce is a single console, with a rich selection of functions. Each function is developed, tested, and perfected individually, then integrated into the system as a finished component. These functions are referred to as modules. When a new capability is needed, the RForce architecture allows for each capability to be self-contained and ready to "plug in" as an RForce Module. Modules can be purchased with the initial system, or added at any later date. The system will automatically configure for any modules present, recognize and reconfigure for any new modules, and will perform in its previous mode when that module is removed. With integral modularity, RForce is able to adapt to rapidly changing signal environments, and adjust to new and developing technologies.

RForce delivers value, eliminating the need to buy a new box when requirements change. Because new modules can be added to RForce to obtain new functionality, the need for purchasing new hardware is eliminated.

RForce provides flexibility, mobility, modularity, and expandability which are critical to meeting customer needs across a variety of today's complex missions and adjusting to meet new challenges as they develop.

TRIASYS TECHNOLOGIES CORPORATION

Specifications

V/UHF Tuner(s)

Frequency Range 20 - 3000MHz
Tuning Res. 100kHz

A/D Converter and

DSP processor

Resolution 16-bit
Sample Rate 125 MHz
On-board FPGA with TriaSys
Channelizer and DDC cores.
Custom FPGA cores can be
accommodated

System Chassis

Power 110/220v
180W max
Dual-redundant
Windows XP Operating System
3U PXI/cPCI backplane
Weight 15 kg (33 lbs)
Operating 0-45 deg. C
20-90% hum.
1.0 Grms
10 G Shock

Base System Options

- Second receiver
- Microwave extension to 6 GHz
- Directional, covert, and/or high gain antennas
- Power inverters

To Inquire or Order

For a demonstration, further information, or to contact a representative, please call 1.978.244.1060, or visit our website at www.triasys.us.

RForce

RForce System Console

The RForce System Console is housed in a portable COTS chassis, with an industry-leading receiver at its core. Based on the DRS Model 9135 V/UHF Tuner, the basic RForce system console boasts a robust set of standard tools for signal detection, recording, playback, and analysis.

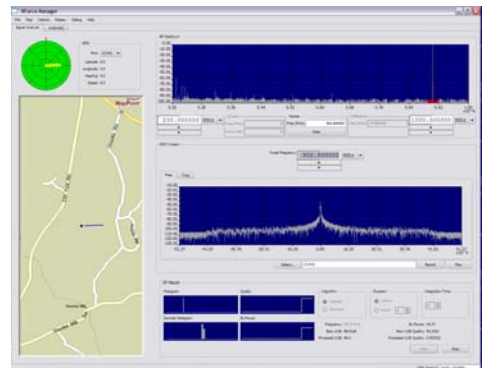
A spectral scan function and a Digital Downconverter (DDC) capability allow RForce to analyze and capture signals of interest for real-time and post analysis applications. The modular RForce architecture supports a variety of advanced signal analysis packages, including customer supplied packages for use with on-line and recorded data.

Flexible digital signal processing hosted on an FPGA-based A/D module provides for in-field changes and upgrades as the environment or tactics dictate.

The RForce System Console also includes GPS location and mapping, which allows for location-based signal survey applications.

Base RForce System Console Signal Processing Capabilities

- 20 - 3000MHz frequency operation
- 30MHz bandwidth
- Full spectral sweep capability.
- Tunable DDC output for signal recording and/or monitoring/demodulation
- On-board signal storage (DDC Output) for signal recording applications
- On-board audio output for operator surveillance



Ordering Information

Model 6100P - Base RForce System Console
Model 6300P - Dual-receiver RForce System Console
Option -MW6 - Microwave extension to 6 GHz
Option -WBR - Wideband Signal Recording
Option -OM1 - High Performance OMNI Antenna (20-3000MHz)
Option -PMR - PMR Automatic Processing Module
Option -HPC - HPCP Processing Module

Optional RForce System Modules

- Direction Finding Module
- Cellular Survey Module (CSM)
- Cellular Active Measures Module (CAMP)
- Automatic Signal Survey/Detection
- Signal Recognition Libraries
- Specialized Response (EW) Modules