



ATS-3100 VRS for Universal Radio Field Test

One Test Set for Legacy, Modern, and Next-Gen Radios

Preparing for Future Radio Field Test Requirements

More sophisticated radios require more rigorous and precise field test. The ATS-3100 VRS (Vector Signal Transceiver-based Radio Solution) is a consolidated, turnkey test platform for testing emerging software defined radio (SDR) waveforms, modern multi-band radios, and legacy radios (e.g. SINCGARS) from virtually any Original Equipment Manufacturer (OEM).

Ideal for use for:

- Legacy, modern, and future radios
- Airborne and ground radios (tactical, land mobile and avionics)
- Multiple OEMs
- Military and commercial radio test

With scalable architecture, 1GHz of instantaneous bandwidth, and the largest Test Program Set (TPS) library in the industry, the ATS-3100 VRS can test a broad range of highly complex radios from more OEMs than comparable solutions.

Developed with the user in mind, the ATS-3100 VRS, the ATS-3100 RTS, and the portable CTS-6010 share a common software framework and test executive. This holistic solution provides synergy from depot to field that covers all levels of maintenance, streamlines test activities, and vastly simplifies complex test procedures.

Flexibility for the Next Generation

The ATS-3100 VRS is built with modular system architecture which features design for maintainability and the capability for future expansion.

Due to its unique design, it boasts exceptional Mean Time to Repair

KEY BENEFITS

- **Complete solution** - test legacy, modern, and future radios from multiple OEMs
- **Higher throughput** - VST from NI delivers faster test times at a wider bandwidth
- **Maximum return on investment** - extend the life of your legacy radios with headroom to test modern and future radios
- **Mobile precision** - production-level quality testing in the field
- **Synergy from depot to field** - common test executive and software framework
- **Reduced downtime** - minimum MTTR and rapid automated calibration
- **Long-term partner** - nearly 60 years of expertise in test and integration solutions

“ Our partnership is enabling the future of radio test today. ”

- National Instruments

(MTTR) with easy, in-and-out access to the primary Line-Replaceable Units (LRUs) and rapid, automated calibration.

Built on the ATS-3100 PXI Integration Platform, the ATS-3100 VRS provides an easy path to upgrade for future technology insertions, so you have headroom for growth as requirements evolve and your maintenance needs change.

Keep Equipment Deployed.

Plagued by costly No-Fault-Found (NFF) returns taking your valuable assets out of service for months? The ATS-3100 VRS has built-in capability to perform a wide range of tests to identify failure root cause, allowing you the capability to repair in-house without buying additional equipment or simply “doing without”.

Features Customized for You.

The ATS-3100 VRS is a fifth-generation evolution of the proven ATS-3100 platform that integrates the leading-edge VST from National Instruments and a low-cost PXIe module from Astronics, containing Radio Frequency (RF), Analog, and Digital Sub-Systems. Additional features include:

- Frequency range from 1 MHz to 6 GHz
- Wide modulation bandwidth up to 1 GHz
- Intuitive Graphical User Interface (GUI) and Test Executive
- Low-cost, two-hour automated calibration and verification
- Reconfigurable and expandable
- PXIe-based platform



The ATS-3100 VRS integrates the PXI VST from NI and a PXI module from Astronics containing RF, Analog, and Digital Sub-Systems.

Your Long-Term Partner.

With nearly 60 years of expertise in the test field and 20 years of proven, leading-edge Radio Test Solutions, Astronics Test Systems has all of the ingredients to support a product for decades. Radio tester design and TPS development are our core competencies and solidify our commitment to partnering with you to develop custom, integrated solutions for years to come.

From the Test Systems Experts.

Astronics Test Systems has provided military, aerospace, and other mission-critical industries with test

instruments and solutions since 1961. The ATS-3100 VRS brings all of our test system development wisdom to you in one, integrated solution.

Get Started Today

For additional details, please contact Astronics Test Systems.

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COMMON
SOFTWARE
FRAMEWORK
AND
TEST
EXECUTIVE



The ATS-3100 VRS (left) and the CTS-6010 (right) enable seamless transition from depot to field due to a common test executive and software framework.