



Automated AIMS Certification





Faster. Accurate. Reliable.

Viasat's VRG AIMS Certification Tools (VACT)

Automate AIMS 1101, 1201, and 1301 certification testing, reducing test timelines from weeks to days while ensuring accuracy, repeatability, and compliance.

The Problem:




Certification Testing is Time-Consuming and Resource-Intensive

-  Manual AIMS testing takes multiple weeks
-  Complex tests are error-prone without automation
-  Regression testing by hand is difficult and time-consuming
-  Limited lab availability slows program schedules

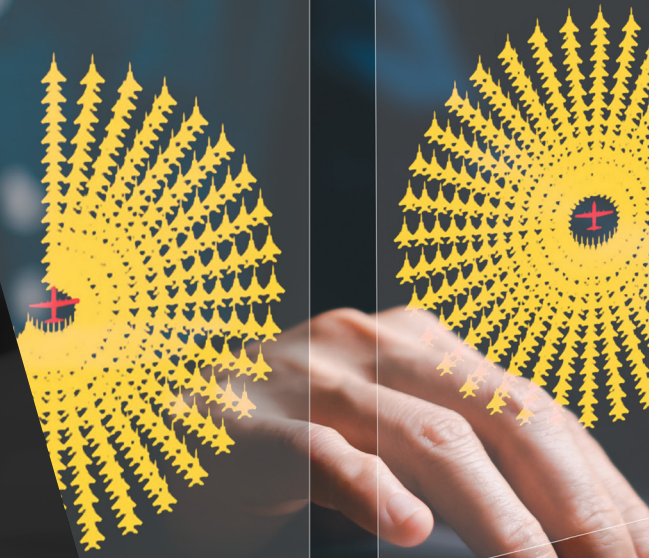
The Solution:

The VACT Advantage

The VRG AIMS Certification Tools (VACT) provide AIMS-certified, automated test environments for IFF systems. Using a single* VRG-1000SD, VACT enables rapid, repeatable certification testing across transponder, interrogator, and passive receiver systems.

-  AIMS-certified tools
-  Automated execution
-  Repeatable, auditable results

*Most AIMS tests require only one VRG. A few tests require multiple VRGs.



WHAT IT TESTS

SUPPORTED AIMS CERTIFICATION TOOLS

AIMS 1101

Transponder Certification

- Full support for Automatic Overload Control (AOC) tests
- Complete AOC tests in 1 hour
- Covers sensitivity, suppression, pulse decoding, Mode 5 recovery, and more

Typical completion: within 3 days

AIMS 1201

Interrogator Certification

- Supports complex Mode S Density scenarios
- Tests receiver characteristics, reply decoding, Mode S controls, and interrogation rates
- Designed for modern, high-density environments

Typical completion: within 3 days

AIMS 1301

Passive Receiver Certification

- Supports receive, decode, target capacity, and operational range testing
- Validates performance under exceeding target capacity scenarios

Typical completion: within 2 days



Key Benefits

Why Customers Choose VACT

- **Time Savings:** Reduce certification timelines from weeks to days
- **Accuracy & Consistency:** Automated execution produces repeatable, reliable results
- **Regression Testing:** Easily re-run tests to catch issues earlier in development
- **Resource Optimization:** Minimize manual intervention and lab bottlenecks
- **Remote Testing:** Enable flexible test execution without constant on-site presence



THE PLATFORM BEHIND THE SOFTWARE

Powered by the VRG-1000 Environment Generator

VACT runs on Viasat's VRG-1000SD platform, providing a realistic, high-density RF signal environment for IFF certification testing.

Supported capabilities:

- High-density IFF signal generation
- ADS-B, Mode 5, Mode S support
- Encrypted interrogations and replies
- Realistic RF environments with path loss and antenna effects
- Real-time encryption of all emitters in our dense environment

VACT automates the following:



Repeat or regress as needed





AT-A-GLANCE SUMMARY

VRG-1000 AIMS Certification Tools (VACT)

- Automate AIMS 1101, 1201, 1301 testing
- Dramatically reduce certification timelines
- AIMS-certified, accurate, repeatable
- Supports regression and remote testing
- Backed by Viasat's trusted RF expertise

Accelerate IFF certification without compromising accuracy or compliance.

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