

# Autometrux

## Test Software Framework

The Autometrux™ Test Software Framework provides an open development platform around which both small and large scale test systems can be rapidly designed, developed, and deployed. It provides a turnkey solution that interfaces all RT Logic Telemetrix® products, common test equipment, and unique user components. It gives customers an off-the-shelf, ready-to-use framework for a full-featured test system management environment. The true power of this framework is the ability to customize its features for your exact system requirements, as well as provide a platform allowing for code reuse on similar projects with supportability and maintainability.

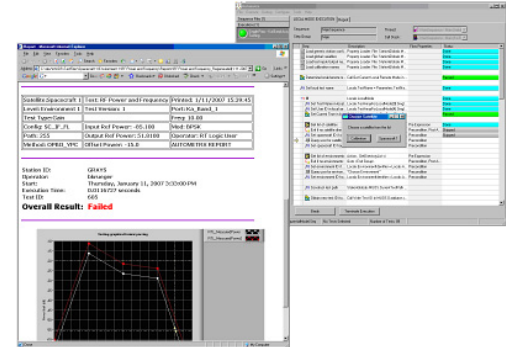
### Application

Challenging test system budgets and project schedules do not allow for development of complex test applications from scratch. RT Logic created Autometrux to address these challenges. Autometrux offers a test software framework that provides a solid foundation in which systems engineers can focus on the most important task at hand—testing the performance of their product. The Autometrux framework has all of the common test components present in automated test systems, allowing you to focus on the test routines and algorithms required for testing your product without having to worry about creating the test management aspects of the system.

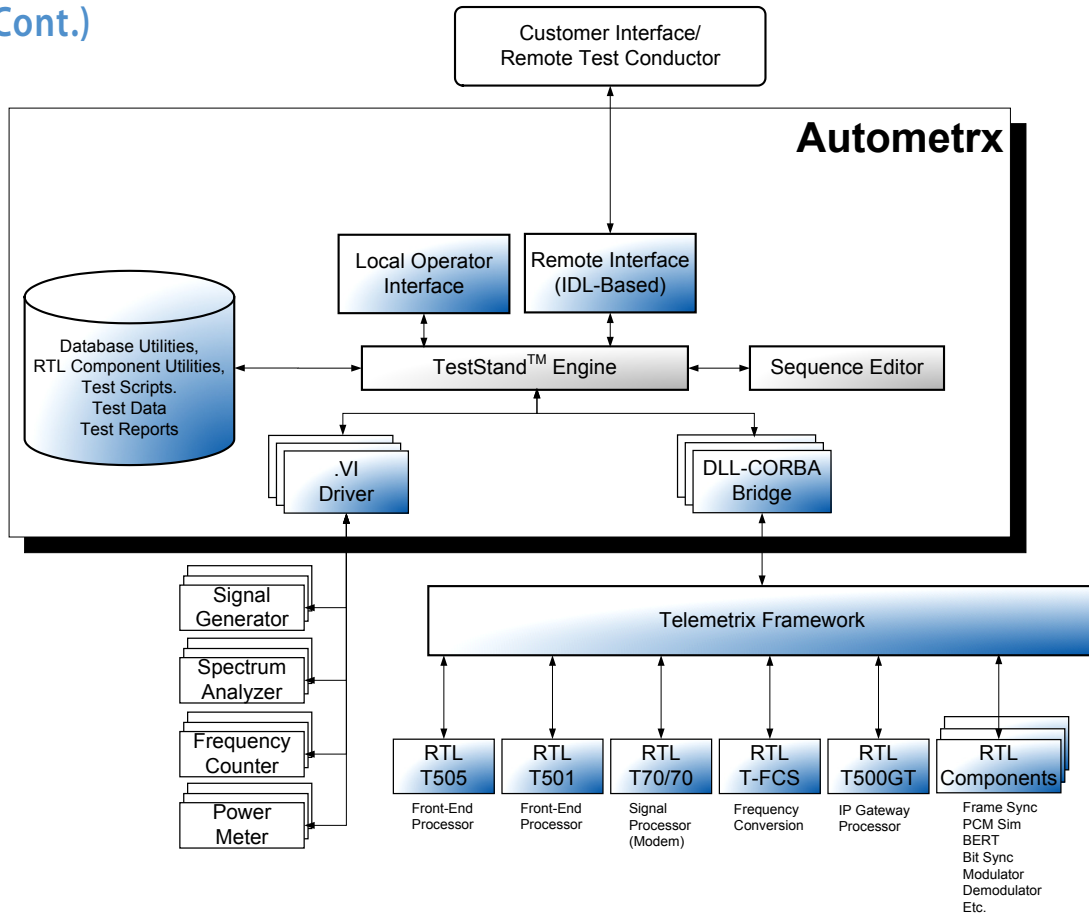
Autometrux provides a generic remote interface, configurable test report formatting, a flexible user-friendly operator interface (GUI), and test scripts that provide the user with a ready-to-run test executive along with the development framework for providing a powerful custom test solution. All configurations and test results are stored in a high availability database that is used for test data retrieval, test parameters, and test reuse. Autometrux uses National Instrument's TestStand™ and LabVIEW™ run-time engines along with RT Logic's Telemetrix proprietary interfaces and algorithms.

Autometrux has additional framework components available for providing test sequences that are portable, flexible, and easily customized for test functions typical in an automated test environment. These components include space vehicle performance test routines, test console calibration routines, and test console system verification routines (self-test). It provides scalable test sequences that allow fault detection for components, system interfaces, and end-user components.

Autometrux is very powerful, simple to use, and does not sacrifice performance. The key components include database utilities, report generation, a DLL-CORBA bridge to RT Logic products and subcomponents, pre-defined test sequences, supported virtual instrument drivers, and a customizable TCP/IP interface that allows for a remote test conductor interface.



## Applicaton (Cont.)



## Features

- Local Operator Interface (Test Manager GUI) with Definable Group and User Access/Privileges
- Remote Interface (IDL-Based)
- Database Utilities (Pre-Defined Database Schema, Read/Write Utilities)
- Sophisticated Test Sequencing, Execution, and Debugging Capabilities
- Test Sequence Editor (Intelligent Sequencing – Multithreaded, Branching, Looping, Variables and Precondition Checking, Parallel Sequence Execution)
- Test Decision Making (Pass/Fail) or Test Limit Checking (Numeric or String Value)
- Test Configuration Management
- Test Result Collection and Archival
- Configurable HTML Test Report Formatting
- RT Logic Telemetrix TT&C Product or Component Scalable Interfaces (DLL-CORBA Translation) Available
- Instrumentation VI Drivers Available (Spectrum Analyzers, Signal Generators, Frequency Counters, Power Meters, Oscilloscopes, etc.)
- Test Console Calibration Routines Available (Path Loss/Gain, RF Power, Frequency Response, Attenuation, etc.)

- Test Console Functional Verification/Self-Test Routines Available
- UUT Performance Test Scripts Available (Modulation Index Measurements, RF Power, Frequency Response, Acquisition, BER, Ranging, Telemetry and Commanding Functions)

## Deliverable Configurations

- Full-Featured Development Package
- Test Sequence Editor
- Local Operator Interface Customization
- Test Report Customization
- Database Utilities
- Extensive Debug Capabilities
- Turnkey Project-Specific Scripts, GUI, Reports, etc. (Customer or RT Logic Provided)
- Run-Time Package
- Test Script Execution (RTL Provided)
- Local Operator Interface
- Test Report Generation
- Basic Debug Capabilities