



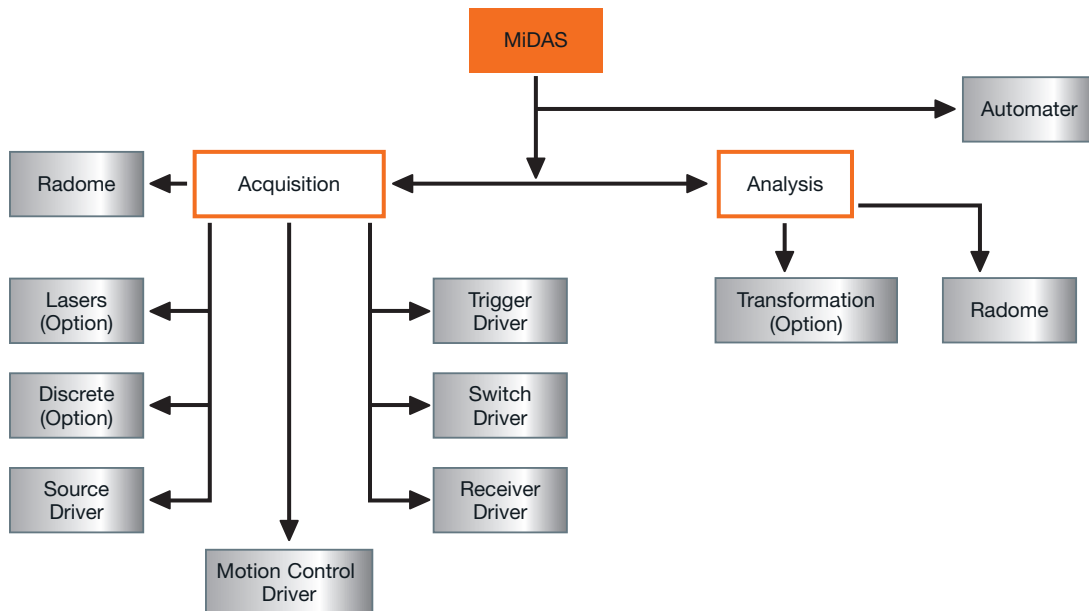
MiDAS

A high performance software package (ISO 90003:2004) designed for automating antenna test range systems. MiDAS is a state-of-the-art antenna measurement software suite, supporting far-field, near-field (Planar, Cylindrical and Spherical) and radome measurement systems.

MiDAS is user-friendly with an intuitive graphic interface. It comprises an acquisition module that is used to control the hardware of systems and manage the test procedures, and an analysis module that is used to process and plot the collected data in the acquisition mode most efficiently.

MiDAS operates on Microsoft Win 7 (compatible with XP OS) and features multi-tasking capabilities.

Overview



DATA ACQUISITION MODULE

The acquisition module has two objectives:

- 1 Enables the user to set the antenna measurement scenario
- 2 Runs and automates the measurements

Main features

- Multi axis control with linked axis capabilities
- Supports a wide variety of receivers, signal sources, spectrums, network analyzers such as Agilent, R&S, Anritsu
- Continuous, step or spin measurement mode
- Variable aspect sampling (dynamic velocity or on- the-fly velocity adjustment)
- Diagnostics tools including axis and RF signal control for a predefined frequency/beam/switch
- Multiple real time display (displays multiple cuts/frequencies/beams in parallel)
- Unlimited shaped area data acquisition: defines a discrete collection of points for measurement
- Batch acquisition mode
- Complete setup configuration, including all parameters, saved in a file
- Redo partial scan on a completed measured file
- Hide/show frequencies (for confidentiality)
- Start measurement with a predefined delay
- Extensive on-line error checking
- Auto repeat scan on error during measurement
- Uncompleted measurement continuing capability in case of power shut down
- Direct and/or gain transfer calibration capabilities
- Support probe array systems
- Restore a setup file from a measurement data file

ANALYSIS AND PLOTTING MODULE

The analysis module has two objectives:

- 1 Displays the data measured during the acquisition process
- 2 Analyzes the results and displays them in the graph/table form

Main features

- Data presentation in 2D or 3D plots (including spherical, contour and polar 3D display)
- Zooming, markers, cursors and different manipulations on line types, style, etc.
- Value and location display for beam peak, beam width, sidelobes and null depth (applicable for raw and transformed data)
- RMS calculation for sidelobes (applicable for transformed data)
- Comparison of patterns in one or more data files
- Subtract or add two data files at the same time
- Wide selection of options for data averaging (complex, amplitude/phase, min. and max. of linear and min. and max. of dB)
- Pass/fail test criteria (for discrete points or patterns)
- Export and import different file formats
- Near-field to far-field data transformation for planar, plane polar, cylindrical and spherical
- Circular polarization analysis (supports both spinning and linear modes)
- Back-projection of data from near-field or far-field
- Time domain analysis
- Radome analysis functions
- Slant analysis for a predefined polarization angle
- Echo reduction module (MV-Echo)
- Far-field coordinate -system convertor

Options



Automater provides the ability to create and run macros to automate the data manipulation and generation of reports.

Real time module allows synchronization between the positioning system, the RF instrumentation and the radar system.

Discrete element calibration mode enables the loading of an element map of a phase array antenna.

Planar, plane polar, cylindrical and spherical near field data acquisition and analysis.

Driver developer kit enables the user to add drivers.

MiDAS Touch, a wireless tablet remote control.

MiDAS output plots

