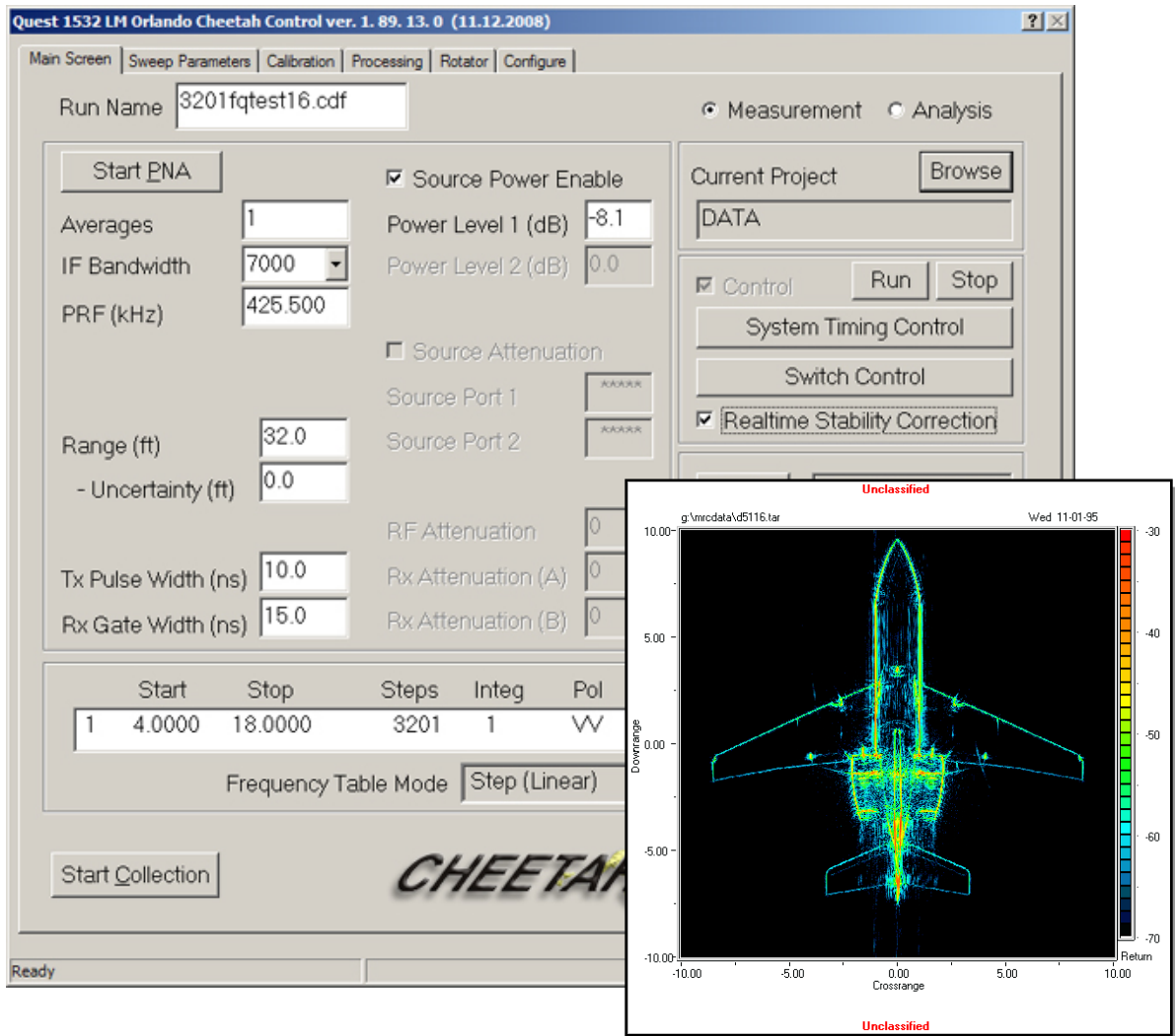


# CompuQuest, inc



The Quest family of data acquisition and analysis systems from CompuQuest, inc are true 32/64-bit MS-Windows applications utilizing a multi-threaded architecture optimized for speed and functionality. They offer the latest in power and versatility to the RCS and antenna measurement communities. While the individual systems offer slightly different styles of operator interface, they each adhere to standard Windows interface protocols. As a result, the graphical user interface (GUI) of each provides the operator with a familiar, intuitive environment for setting up and monitoring the data acquisition or data analysis process. A flexible plotting module provides the operator with a wide range of display options, including polar, rectangular, color pixel and contour formats. Operator-defined presets can be saved to disk and later recalled for quick, "one button" operation. Additionally, the operator can design complex batch processes using these presets for unattended, multi-run data collection or data processing sequences.

# Quest 1532 PNA and Cheetah Software

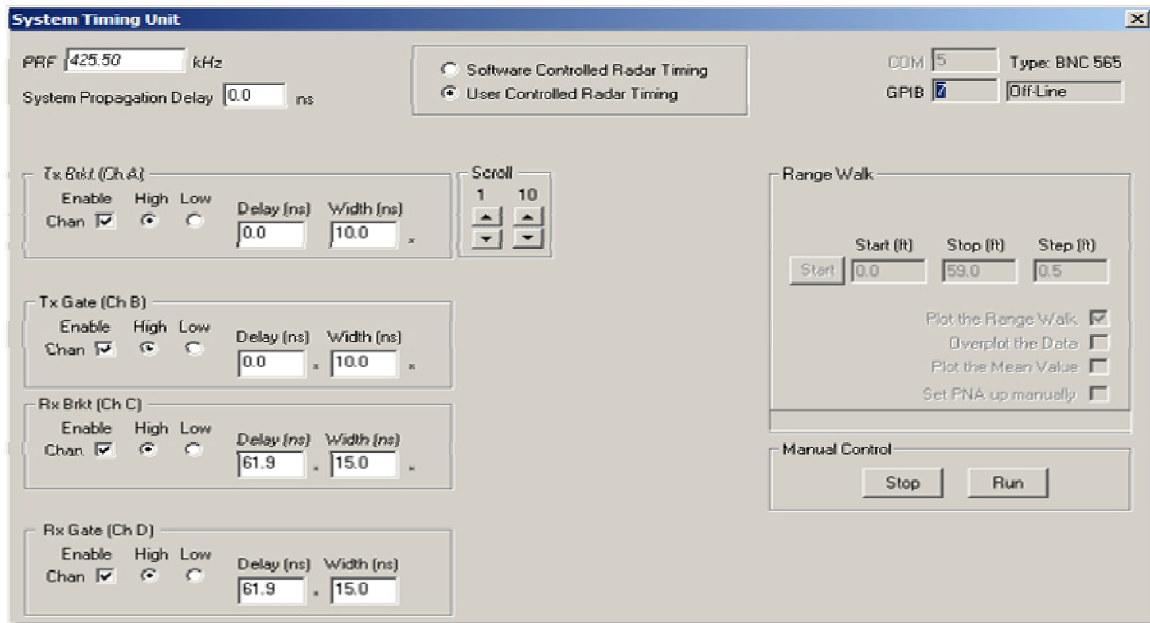
A new class of collection software, the Quest 1532 Data Acquisition System, is designed for the latest Agilent performance network analyzer (PNA) family of measurement hardware. Its modular architecture, however, allows it to be interfaced to a wide range of measurement systems. The Quest 1532 package provides all the functionality and capability as the [Quest 1541 system](#), but with a GUI for instrument control tailored to the Agilent PNA functionality. Special features of the PNA such as calibration, time domain processing, and multi-channel operation can be setup and controlled. The Quest 1532 also uses the PNA's DCOM/COM interface to provide the fastest level of data transfer. CompuQuest designed and developed the DLL that controls the PNA to provide access to all of its unique capabilities.

The Quest 1532 software forms the foundation of the Cheetah Data Collection and RCS Processing package. This version of the Quest 1532 is designed specifically for the [System Planning Corporation's Cheetah Measurement System](#). This is a gated continuous-wave measurement system designed around the Agilent PNA and an SPC developed timing unit and transceiver.

CompuQuest engineers worked directly with SPC during the development of the Cheetah system to create a software package that is seamlessly integrated to provide both a user interface and processing system that fully supports all of the unique features of the Cheetah measurement system, including complete control of the timing and gating unit, phase coding, built-in test (BIT) support, and PRF line avoidance to name a few.

Like all of the other CompuQuest Data Collection systems, the Quest 1532 software provides a complete, post-collection data analysis module. Post processing provides a number of additional features not available during data collection including full scatter matrix correction and ISAR imaging edit and reconstruction. A complete statistical analysis module is available to calculate and plot sector averages, medians and cumulative probabilities.

The Quest 1532 software package can be hosted on inexpensive, off-the-shelf PCs running Windows Vista/XP/2000. The computer and desired peripherals can be provided by the customer or bundled together with the software in a turn-key system.



**COMPLETE SYSTEM**

- Off-line Processing
- Calibrated RCS
- Fine Downrange Profiles
- Background Subtraction
- Time-domain Gating
- Configurable Interface
- Doppler Spectra
- Numerous Printing Options

**POWERFUL OPTIONS**

- ISAR Imaging
- SAR Imaging
- 3D Imaging
- Nearfield Correction
- Edit and Reconstruction
- Image Math
- Antenna Measurement
- Full Scattering Matrix
- Statistical Analysis
- Movie Generation / Animation

**FLEXIBLE INTERFACES**

- Agilent PNA
- MKIV / MKV
- HP 8510 / HP 8530 / HP 8720
- National Instruments IEEE-488/DIO
- Multi-axis Positioner Control
- Switch Box Control

**MULTIPLE DISPLAY FORMATS**

- RCS and Antenna Processing
- Global Range and Swept Frequency
- Line, Pixel, Contour, "Waterfall"
- Rectilinear and Polar Plots

**USER FRIENDLY**

- Standard Windows GUI Protocols
- Single, Intuitive User Screen
- Screen Edit of all Parameters
- Pre-defined Setups
- Multi-level Error Checking

**PC PLATFORM**

- Inexpensive, Off-the-shelf Hardware
- Easily Upgradable or Expandable
- Multiple Displays Support
- Network Communications
- Supports Standard Peripherals
- Windows Vista/XP/2000

**FLEXIBLE FILE FORMATS**

- elan
- Lintek 5000
- Radarman
- Common Data Format (CDF)
- SPC MK III / IV / V

**ANTENNA STATISTICS**

- Beamwidths at 1, 3, 6, 10 dB
- Peak, Sidelobe and Null Locations
- Hemispherical and Radiative Levels
- Efficiency and Directivity
- Full Antenna Gain Listings
- Automated PASS / FAIL Testing

**COMPUQUEST BACKED**

- Source Code Included
- One Year Warranty
- Full Documentation
- On-Line Help

For additional information or a demo version of any of the CompuQuest products, please contact CompuQuest, inc. at:

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