



Venable Instruments is pleased to introduce the state of the art version of the workhorse Frequency Response Analyzer that helped establish Venable as the market leader. The new **Model 7405** continues to provide many customers with reliable and accurate performance. Enhancements are described below and on the right.

The Venable **Model 7405** Frequency Response Analyzer combines the latest analog and digital technology with advanced DSP to provide versatile test and analysis functions. This single, comprehensive hardware and software system performs many sophisticated test functions and boasts an expanded bandwidth of **10μHz to 5, 20 or 40MHz** along with 4 input channels protected to 600 Vpk.

The **7405**, combined with Venable's renowned and proprietary K-Factor based software, now known as **Stability Analysis™**, is your most complete, accurate, easy to use system for power supply design. Our Spice™ like modeler and 3 circuit topologies provides the design engineer with a single measurement solution, eliminating trial and error and increasing productivity. Results and graphs are easily exported in jpeg or .ven file format for presentation graphics or off-line number crunching." Others can view the .ven files via our READER, downloadable at no cost. Operating through the industry standard IEEE-488 interface, the Venable system imports/exports to MATLAB™ and Excel™ and saves Bode/Impedance Plots in .jpeg for use in presentation graphics software or .ven file format for number crunching off-line.

Venable Instruments incorporates the latest CPLD technology to unleash the power of a dedicated processor, performing all data acquisition and analysis functions. A separate processor handles all the communication functions. Optimum performance derives from the use of storage within the CPLD, which enables synchronous buffering between the processor and the analog hardware. The **7405** performs simultaneous analysis on all four input channels, reliably capturing all data. This truly versatile instrument, complete with its wide range of applications is available to you packaged in a tough, yet portable case, weighing just 12 pounds. Engineers and scientists now have the speed and technology for production, R&D Labs, academia, or field operations bundled into one compact and affordable system, the Venable **Model 7405**.

Venable, a pioneer in stability analysis for over 35 years, continues to support the test and measurement customers with cutting edge instruments and analysis software.

"World Leader in Stability Analysis Systems and Engineering"

Description:

Generator:

Frequency Range:

AC Amplitude

DC Bias

Modes:

Log Sweep

Output Amplitude

Compression:

Output Impedance:

Output configuration:

Isolation from Chassis Ground: 600V

Analyzer:

Measurement frequency range: 10μHz to 5, 20 or 40MHz

Input Configuration: Single-ended floating (600V)

Input impedance selectable: 50 ohms or 1 Meg ohm (default)

Measurement Accuracy: ± 0.03dB + .1dB/MHz;
± 0.4deg + 1deg/MHz

Measurement Technique: Narrowband DFT

Delay Time: 0-100 sec

Integration Time: 20msec to 100ksec

Integration Cycles: 1-9999 cycles

Input coupling: DC, automatic DC offset
cancellation

Input Range: 10mV to 500Vpk Full Scale in
11 ranges, Auto-ranging

Dynamic Range: 120 dB

CMRR/IMRR: 120 dB

Max. Input: ±500Vpk

Max Input Withstand Voltage: ±600Vpk

Over-range alarms: LED indicator

System:

PC Interface: IEEE-488 standard interface for
Windows in USB 2.0

Auxiliary Output: 12Vdc/400mA 4.8W for accessories

Application software: Venable Stability Analysis™ v5 for
WinXP/7, 8 & 10

Real time display update: Each point is plotted as acquired
Data Analysis: Gain margin, phase margin,
impedance; Components: R, L, C, Z

Power Requirements: 90 to 264Vac, 48 to 62Hz, 30VA

Weight/Dimensions: 12 Lbs. - 17"x10"x3.5"



Front View



Back View



Rack Mount View

"World Leader in Stability Analysis Systems and Engineering"