



Venable Instruments is pleased to introduce the next generation of precision measurement solutions for power supply design.

The Venable **Model 8800** Frequency Response Analyzers combine 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 2 input channels protected to 600 Vpk and a digital data port to interface to a target processor.

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 digital interface "Sync" signal provides synchronization between analog and digital hardware. The **8800** series performs simultaneous analysis on both analog input channels and the digital target processor, reliably capturing all data. The digital interface can be disabled, via software, to use the analyzer in a standard 2 channel, analog only, configuration.

The **8800** series, 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.

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 a compact and affordable system, the Venable **Model 8800** series.

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"

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|-------------------------------------|---|
| Description: | Venable 8800 Series, 2 channel, DFRA, 5, 20 and 40MHz Models |
| <u>Digital Analyzer:</u> | |
| Interfaces | 1°C and Sync Out (3.3V) |
| Integration Cycles | 1-10 |
| Measurement frequency range: | 10mHz – 1MHz |
| Supported Processors | Contact Venable |
| <u>Analog Analyzer:</u> | |
| 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 |
| <u>Generator:</u> | |
| Frequency Range: | 10µHz to 5, 20 or 40MHz (sine wave) 10µHz to 1MHz (square wave) |
| AC Amplitude | 1mV to 10V |
| DC Bias | ±10V, 10mV Steps |
| Modes: | Single Frequency, sine sweep, and linear sweep steps |
| Log Sweep | 0.1 – 2000 Steps per decade 10µHz – 5MHz step |
| Output Amplitude | Dynamically adjust output to maintain a constant input level through Venable software servo |
| Compression: | Switchable 50 ohms/2 ohms |
| Output Impedance: | Single-ended floating |
| Output configuration: | 600V |
| Isolation from Chassis Ground: | |
| <u>System:</u> | |
| 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" x 10" x 3.5" |



Front View



Back View



Rack Mount View

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