



Venable Instruments introduces a new concept in test instrumentation. The Venable Model 3120 Frequency Response Analyzer combines the latest analog and digital technology with advanced digital signal processing to provide versatile test and analysis functions. This single comprehensive unit performs many sophisticated test functions. Boasting such features as a bandwidth of .01Hz to 2.2MHz, 2-channels, 500V input and using Venable's renowned v3.1 software, the 3120 is your most complete, accurate and easy to use system for phase/gain and impedance measurements. Operating through IEEE-488 bus, the Venable system imports/exports to MATLAB™ and Excel™ and saves Bode/Impedance Plots in .jpeg file format.

Venable Instruments incorporates the latest FPGA technology to unleash the power of a dedicated DSP, performing all data acquisition and analysis functions. A separate processor handles all the interface functions. Optimum performance derives from the use of distributed RAM within the FPGA, which enables asynchronous buffering between the processors and the analog hardware. The 3120 performs simultaneous analysis on both 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 10 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 3120.

Venable, a pioneer in stability analysis for 23 years, continues to support the test and measurement customers with cutting edge instruments and analysis software. The Model 3120 brings an economical option to Venable's lineup of top quality instrumentation.



Description

System Frequency Range:
Generator Amplitude
DC Bias
Generator Isolation
Generator Modes

Output Amplitude
Compression
Input Channels
Meas. Technique
Bandwidth Resolution

Input coupling
Input Range
Input Accuracy
Max. Input
Overrange alarms
Input Isolation: chassis
CMRR
PC Interface

Power Requirements
Display
Real time display update
Data Analysis

Operating System

Support

Reliability

Venable 3120

.01Hz to 2.2MHz
10mVac to 10Vac
±10Vdc
Referenced to chassis ground
Single frequency, sine sweep,
sweep with manual step control,
amplitude servo
Dynamically adjust output to
maintain a constant input level
2, isolated, floating
Narrowband DFT
4 Selectable Bandwidths and DC
100 mHz, 400 mHz, 3 Hz, 20 Hz
AC and DC
10mV to 500V rms in 11 ranges
±.05dB, ±.25° typical @ 10kHz
±500Vpk
LED indicator
±500V from ground
>110dB at 100V, 1KHz.
Implements IEEE-488 standard
interface for Windows in PCMCIA,
PCI, USB
90 to 264Vac, 48 to 62Hz, 30VA
Venable v3.1 Software Interface
Each point is plotted as acquired
Gain, phase, angle, real, imagi-
nary, R, L, C, Z
Venable v3.1 software for Win:
95/98/NT/2000/ME/XP
Total system by factory engineers:
hardware, software, applications
Calibration traceable to NIST;
recommended recalibration once
per year.