

**New - Portable  
Field Testing  
Solution!**



Portability and affordability meet with the new Venable **Model 5140** Frequency Response Analyzer (FRA). The **Model 5140** is the field engineer's choice for a robust yet lightweight and durable unit to take to remote sites for stability testing and measurement. The smaller format **Model 5140**, weighing in at only 4 pounds, equips road warriors with testing and measurement capabilities, including Venable's **Model 5140 Stability Analysis™** software, and options for our RLC fixture and software, LF (Low Frequency) and GP (General Purpose) Bode Boxes, and a rugged Pelican™ Case for secure transport.

The Venable **Model 5140** Frequency Response Analyzer combines the latest mixed signal 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 **1Hz to 40MHz** along with 1 input channel isolated to 600 Vpk.

The Venable **Model 5140** ships with its own version of Venable's renowned K-Factor based software, known as **Model 5140 Stability Analysis™**. The most complete, accurate and easy-to-use portable system for phase/gain and impedance measurements, the **Model 5140** operates through the industry standard USB 2.0 or IEEE-488 (GPIB) interface, with Excel™ and text file formatting 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 SDRAM, which enables synchronous buffering between the processor and the analog hardware. The **Model 5140** performs simultaneous analysis on both input channels, reliably capturing all data.

This truly versatile solution, with its wide range of applications, arms your Field Application Engineers (FAE) with a complete yet compact, portable and affordable testing and measurement system: the Venable **Model 5140**.

Venable, a pioneer in stability analysis for over 30 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:**

**Venable 5140, 2 channel, 40MHz**

Generator:

Frequency Range:	1Hz to 40MHz (sine wave)
AC Amplitude	10mV to 10V
DC Bias	±10V, 10mV Steps
Modes:	Single Frequency, logarithmic, and linear sweep steps
Log Sweep	0.1 – 2000 Steps per decade 1Hz – 40MHz step
Output Amplitude	Dynamically adjust output to maintain a constant input level through Venable software servo
Compression:	
Output Impedance:	50 ohms
Output configuration:	Single-ended grounded

Analyzer:

Measurement frequency range:	1Hz to 40MHz
Input Configuration:	Ch.1 Single-ended floating (600V)
Input impedance:	1 Meg ohm
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 10Vpk Full Scale in 7 ranges, Auto-ranging
Dynamic Range:	120 dB
CMRR/IMRR:	120 dB
Max. Input	±100Vpk
Max Input Withstand Voltage	±100Vpk
Over-range alarms	LED indicator
Calibration	NIST Standard

System:

PC Interface:	USB 2.0 IEEE-488 (GPIB) standard interface
Auxiliary Output:	12Vdc/400mA 4.8W for accessories
Application software:	Venable Stability Analysis™ for Win 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 Supply Requirements:	90 to 264Vac, 48 to 62Hz, 30VA, 24VDC, 24W (Min)
Weight/Dimensions	4 Lbs. - 9.8"x 9.8"x 3.2"



**Model 5140**

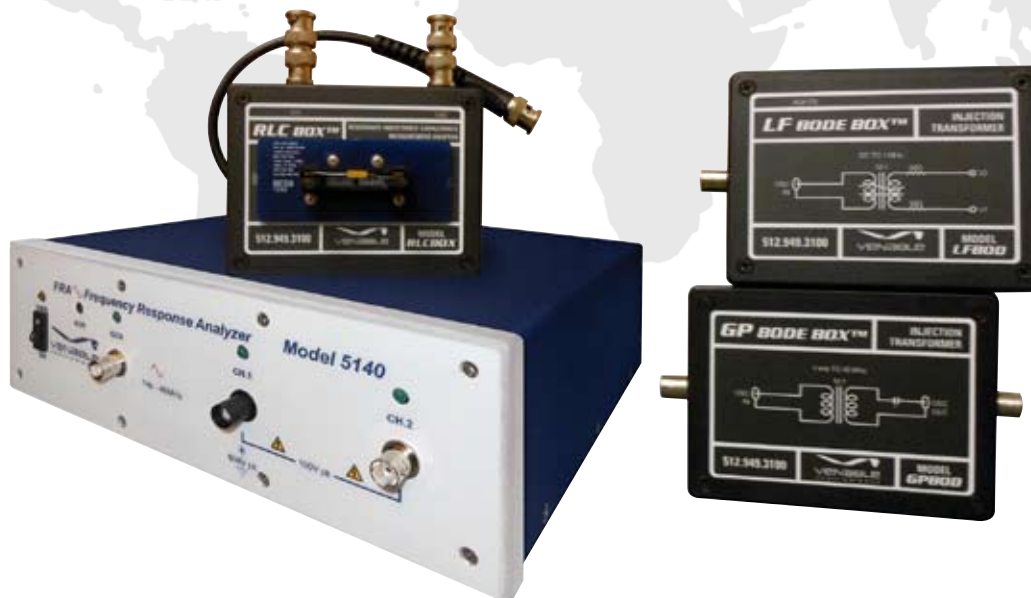
**40MHz**



**Front View**



**Back View**



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