



74XX Frequency Response Analyzer



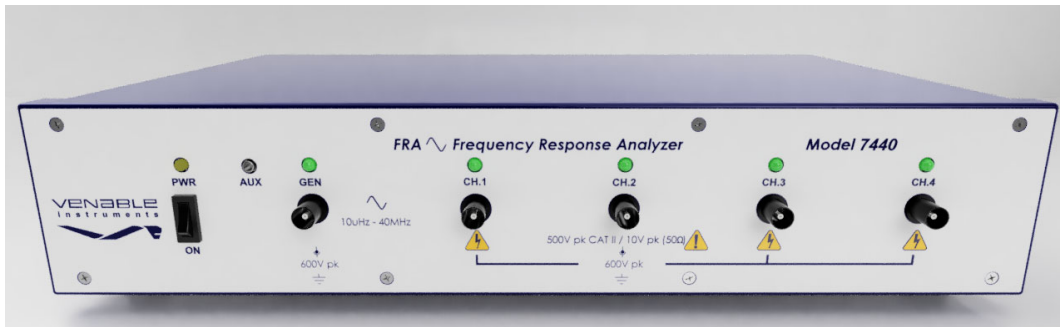
Venable Performance Advantage

- High Common Mode Rejection Ratio > 120dB
- Channels feature auto ranging for high dynamic range (+/- 120 dB)
- Superior noise rejection - narrow bandwidth DFT
- Automatic DC offset for very low frequency measurements
- High voltage channel inputs and oscillator that float to 600V
- Line frequency optimization for analysis on AC based systems
- Life-time Tech and Application support from Austin, Texas USA
- Software with unlimited seats, no subscriptions needed
- Cumulative 80+ years of experience in power supply design & testing

The Venable **Model 74XX**, 4 channel Frequency Response Analyzer combines analog and digital technology with advanced DSP to provide versatile test and analysis functions. This single, comprehensive hardware and software system performs many test functions and boasts an expanded bandwidth of **10µHz to 5, 20 or 40MHz** (Models 7405, 7420 and 7440). All 74XX models feature expanded bandwidth of 10µHz to 5, 20 or 40MHz along with 4 input channels protected to 600 Vpk.

Venable, a pioneer in stability analysis for over 40 years, continues to support the test and measurement customers with cutting edge instruments and analysis software. All instruments are designed, manufactured and supported in Austin, TX, USA.

Generator	
Frequency Range	10µHz to 5, 20 or 40 MHz (sine wave) 10µHz to 1MHz (square wave)
AC Amplitude	1mV to 10V
DC Bias	0 to ± -10v, 10mv step
Sweep Type	Single Frequency, Linear Sweep, and Log Sweep
Sweep Points or Points per Sweep	0.1 - 2000 Steps per decade (Log Step) 10µHz - 5MHz/20MHz/40MHz step (frequency or Hz Step)
Output Amplitude Compression	Dynamically adjust output to maintain a constant input level through Venable software servo
Output Impedance	Switchable: 50ohms or 2ohms
Isolation from Chassis Ground	600V
Analyzer	
Measurement Frequency Range	10µHz to 5, 20 or 40MHz
Input Configuration	Single-ended floating (600V)
Input Impedance Selectable	50ohms 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	120dB
CMRR/IMRR	120dB
Max Input	±500Vpk
Max Input Withstand Voltage	±600Vpk
Over-range Alarms	LED indicator
System	
PC Interface	USB 2.0 and IEEE 488 (GPIB)
Auxiliary Output	12Vdc @ 400mA, 4.8W for accessories
Application Software	Venable Stability Analysis™ for Win 7/8/10/11
Real Time Display Update	Each point is plotted as acquired
Data Analysis	Polar coordinates: Gain magnitude, Phase, Gain margin, and phase margin Impedance: R, L, C, Z magnitude, and Phase
Power Requirements	100-240 VAC +/-10%, 50/60 Hz, 36 W
Weight/Dimensions	13 Lbs. / 17"x 10"x 3.5"



Front 7440



Back 7440



Rack Mount (Example 6340)