# TINALab II High Speed Multifunction PC Instrument









# What does it do?

With TINALab II you can turn your laptop or desktop computer into a powerful, multifunction test and measurement instrument.

Whichever instrument you need multimeter, oscilloscope, spectrum analyzer, logic analyzer, arbitrary waveform generator, or digital signal generator it is at your fingertips with a click of the mouse.

In addition TINALab II can be used with the TINA circuit simulation program for comparison of simulation and measurements as a unique tool for circuit development, troubleshooting, and the study of analog and digital electronics.

# What does it do?

Features include real time:

- Storage Oscilloscope
- Signal Analyzer
- Logic Analyzer

TINALab II includes a DC to 50MHz bandwith, 10/12 bit resolution, dual-channel Digital Storage Oscilloscope. Due to its advanced equivalent-time sampling technology, TINALab can acquire any repetitive signal with up to 4GS/s equivalent sampling rate, while in single shot mode the sampling rate is 20 MS/s. The full scale input range is ±400V, with 5mV to 100V/div ranges.

The synthesized Function Generator provides sine, square, ramp, triangle and arbitrary waveforms from DC to 4MHz, with logarithmic and linear sweep, and modulation up to 10V

peak to peak. Arbitrary waveforms can be programmed via the high level, easy to use language of TINA's Interpreter.

Working automatically in conjunction with the Function Generator, the Signal Analyzer measures and displays Bode amplitude and phase diagrams, Nyquist diagrams, and also works as Spectrum Analyzer.

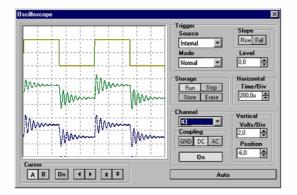
Digital I/O for the high-tech Digital Signal Generator and Logic Analyzer instruments allow fast 16-channel digital testing up to 40MHz.

The optional Multimeter for TINALab II allows DC/AC measurements in ranges from 1mV to 400V and 100  $\mu$ A to 2A. It can also measure DC resistance in ranges from 1W to 10MW.

Using TINALab II with TINA gives you the unique capability to have circuit simulation and real time measurements in the same integrated environment. This provides an invaluable tool for troubleshooting and brings your designs to life by comparing simulated and measured results.

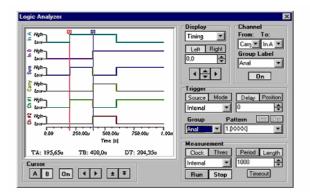
You can also plug Experimenter Modules into the slot on the front of TINALab II, allowing you to simulate, measure, and troubleshoot virtually the whole range of analog and digital electronics.

### **Real-time Storage Oscilloscope**



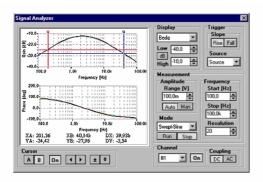
Observe the actual time response of your circuit. Set up the Function Generator for waveform, amplitude, and frequency, drive the test circuit, and see the real-time response along with thevirtual response of the simulated circuit.

### **Real-time Logic Analyzer**



Set up the test stimulus for your logic circuit with the Digital Signal Generator and see eight channels of your circuit's real-time digital response on the Logic Analyzer.

## **Real-time Signal Analyzer**



Measure the frequency response of your circuit in real-time. **TINALab**'s Function Generator will generate a real swept-sine signal, capture the response, and display it on the Signal Analyzer, where it can be compared to the virtual (simulated) measurements. Set up the test stimulus for your logic circuit with the Digital Signal Generator and see eight channels of your circuit's real-time digital response on the Logic Analyzer.

For more details and UK pricing contact Justin Waters, email:

Justin@matrixmultimedia.co.uk

Tel 01422 252 383.