

VITREK



Vitrek.com



**Electrical Safety
& Test Equipment
for Military & Aerospace
Applications**

XITRON
By **VITREK**

VITREK

Leading Supplier of Electrical Safety & Test Equipment for 25+ Years.

Military and Aerospace electronics require similar testing for electrical safety as other electronics, but test to different standards. Vitrek's products are ideal for all of your test and compliance applications.

Vitrek's electrical safety testing equipment supports a variety of product safety certifications for military and aerospace applications. Some tests include:

- MIL-STD-2223 Cable & Wire Harness Testing
- MIL-STD-202G Test Method Standard Electronic & Electrical Component Parts
- AS4373F Testing Aerospace Cables
- Electrical Connector Standards including MIL-DTL-26482, MIL-DTL-32139, MIL-DTL-38999, MIL-DTL-83513, MIL-DTL-83527 and MIL-DTL-83538 to name a few.

To learn more about these standards, visit our industry pages at www.Vitrek.com.

V7X Series Hipot Testers

Whether you are on a base or a ship, Vitrek's V7X Series electrical safety testers are an important part of safety programs designed to prevent electrical shocks and fires.

The V77 is a six-in-one instrument that is ideal for military and aerospace applications where you do not have the luxury of carrying multiple pieces of equipment. You can perform AC Tests, DC Tests, Insulation Resistance, Continuity, Ground Bond and/or Switching all from the convenience of a single compact, easy-to-use instrument.

The V7X is equipped with a color LCD touchscreen for easy use and programming and sets the standard for price and performance. Compact and rugged, the unit is Made in the USA and meets UL, CSA, TUV and IEC Hipot requirements. The V7X provides unbeatable speed, accuracy, user safety and reliability.

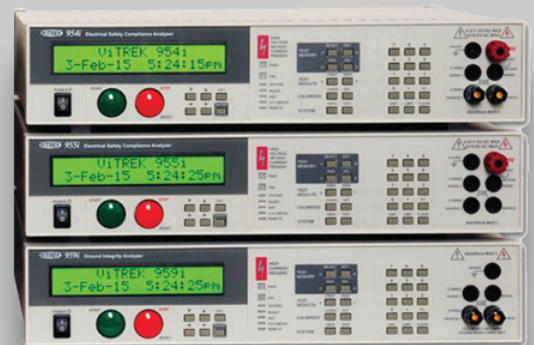
Choose from six low-cost models offering AC & DC Hipot to 5KV, leakage current measurement to 100 nano-amps, Insulation Resistance to 450 GΩ, ground bond to 30 amps and built-in switching. Combine all that with USB, RS232 and Digital I/O interfaces, plus a two year warranty, no other Hipot tester can compare.



95X Series Hipot Testers

Oftentimes, military equipment is large and ruggedized. Therefore, it can also have a higher capacitance. The 95X Series of hipot testers is ideal for this application because it provides the power and versatility you need for your most demanding electrical safety test applications and can be equipped to handle up to 500VA of power. Other testers may not have the current drive to charge and test these larger systems.

The 95X features DSP technology to bring you the safest, fastest, feature rich Hipot tester available. The 95X series combines high output power with a range of AC & DC voltage outputs and extremely low leakage current measurement. The unit is equipped with a 4-wire milli-ohmmeter with dynamic range up to 150K ohms and an overlapping Tera-ohm class Insulation Resistance function. Top that off with an available 40 Amp ground bond capability and you can see that the 95X series is the ideal choice for most electrical safety testing requirements.



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964i High Voltage Switching (Multi-Conductor, Multi-Point Hipot Testing) System

One of the highest failure rates in military and aerospace applications is cabling. Vitrek's 964i High Voltage Switching System is the ideal choice for automated multi-conductor, multi-point hipot testing.

You have a job to do – you have to hipot test a cable at 2500V to ensure that each conductor is properly isolated from every other conductor. You have two choices, you can try to do it manually or you can use the Vitrek 964i to automatically route the HV and return signals to the proper test points. The manual method is extremely problematic. Slow, error prone, labor intensive, operator hazardous – and don't even think about recording the test results.

The 964i on the other hand, is purpose built to fully automate all of your high voltage switching needs. The 964i makes the perfect tool for depot repair because it can quickly screen through cables and determine which are bad. When used with QT Enterprise, testing profiles for many different types of cables can be saved and recalled as needed.



QT Enterprise Software

QT Enterprise is the most powerful and flexible electrical safety test automation software available on the market today. QT Enterprise software is available for use with Vitrek V7X & 95X Series Hipot testers, 964i HV Switching system, and the 98X Series of IR Testers to streamline your test sequences and record keeping and provide the features you want...and need...for your electrical safety tests.

Procedures stored via QT Enterprise can be recalled via a bar coded scan to enable fast and accurate setup. For complex setups, QT Enterprise can display detailed instructions and images to the operator to ensure proper connections prior to testing.

Data from every test is recorded and can be recalled for auditing purposes or detailed analysis on testing or product performance.



98X Teraohmmeter/IR Tester

The 98X Series Teraohmmeter/IR tester is designed to tackle the toughest high resistance measurement applications that most other IR testers won't measure up to. RF cables, for example, have subtle variations. When matching cables the 98X makes the process easier with IR up to 15 Teraohms. This instrument has been used to replace custom instruments costing over \$250k!



Built upon the same DSP technology that has established Vitrek as a leader in hipot test systems, the 98X devices feature a unique combination of performance features including:

- Multi-Dwell Functionality (multiple steps without having to return to zero between steps)
- High Speed Testing (with dwell times as low as 100 ms)
- Pico-Amp Leakage Measurement (with stable and precise 50 Teraohm IR readings)
- Continuously Variable IR Test Voltage (adjustable over the full output range of the instrument)
- Multi-Mode Insulation Resistance Tests (three test modes - end on time, end on pass, end on fail)
- Capacitance Test Modes (critical for solar panels, cable harnesses and other capacitive loads)

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Power Analyzers

Vitrek offers a variety of power analyzers to meet your specific requirements. Our precision harmonic power analyzer, the PA920 is the most accurate power analyzer available on the market today (0.024%). The PA920's modular design can hold up to 4 channels of power measurement in any combination of different channel card types. It is flexible, easy-to-use and provides high-performance — at a price that won't break your budget.



The PA920 is the workhorse of power analyzers. It can be used for testing one and three phase motors and generators, power supplies, inverters and loads. It can operate from uW to MW. It's six test instruments in one: 1) Power Analyzer, 2) Oscilloscope, 3) Data Logger, 4) Conducted Emissions Analyzer, 5) Spectrum Analyzer and 6) Phase Meter. It is also small, light, accurate and easy-to-use. Whether you are testing lasers or railguns, this unit can save the day!

DL Series DC Electronic Load

Vitrek's DL Series of DC Electronic Load devices are the ideal choice in depot repair facilities to emulate the changing of light DC loads that you see in the field. The DL Series is equipped with an easy-to-read color display and is a combined load, four five-digit meters, an oscilloscope and a datalogger in one compact, easy-to-use instrument.

The design utilizes high performance semiconductors with high speed and high accuracy, and wide dynamic range of loading from 10 μ W to 14.5 kV. The DL Series offers transient and non-linear loading capabilities and sweep feature. The highly accurate (0.035% base voltage and current accuracies) enables use in a wide range of applications from production line settings to the engineering bench.



4700 Series High Voltage Meter

The 4700 Series precision high voltage meter offers the highest level of measurement accuracy when it comes to high voltage measurement equipment. It's color touchscreen is easy to use for set up and display of test results. Vitrek leverages DSP technology to provide outstanding AC & DC high voltage measurement accuracy, stability, repeatability and resolution. The 4700 offers performance that rivals traditional high voltage reference dividers — yet unlike the tedious divider, the 4700 provides instant, direct, high voltage measurements in a highly portable, compact and rugged bench top enclosure.

The 4700 high voltage meter measures up to 10KV DC or rms AC directly and with available HV Smartprobes, the high voltage measurement range can be extended to 35KV, 70KV, 100KV and 140KV.



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To schedule a **FREE Product/Application Review**
e-mail info@vitrek.com or schedule a meeting
online at www.Vitrek.com/applicationreview



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