VITREK



Electrical Safety and Test Solutions

MADE IN USA

Why Choose Vitrek?

At Vitrek, precision drives performance. For more than 35 years, we've been setting the standard for technical innovation, service, and value in high-voltage test and measurement, non-contact measurement, metrology, engine balancing, and data acquisition. Our growing family of brands includes GaGe and MTI Instruments—renowned test and measurement innovators trusted by some of the most well-known global brands and institutions.

From the development of life-saving vaccines to mission-critical military operations, we help drive safety and performance in the most precise, cost-effective way possible.

Advanced Innovation and Expertise

Our team of experienced engineers has extensive knowledge of precision electrical test and measurement, including analog measurements (from microvolts to kilovolts, from amperes to picoamperes and from microohms to tera-ohms); high voltage effects on measurements; innovative digital signal processing techniques; and intuitive display and control interfaces and automation software.

Exceptional Value and Service

Our technology is designed to be easy to use, reliable, and cost-effective without compromising quality. In fact, our products typically exceed the performance of competitor units. All Vitrek's products come with our pledge to provide world-class technical resources and support.

Made in the USA and ISO 17025 Accredited

All Vitrek instruments and systems are designed and manufactured in the U.S.A. Our calibration laboratory in Lockport, IL is ISO 17025 accredited. We provide ongoing calibration services and documentation to help maintain traceability to NIST.



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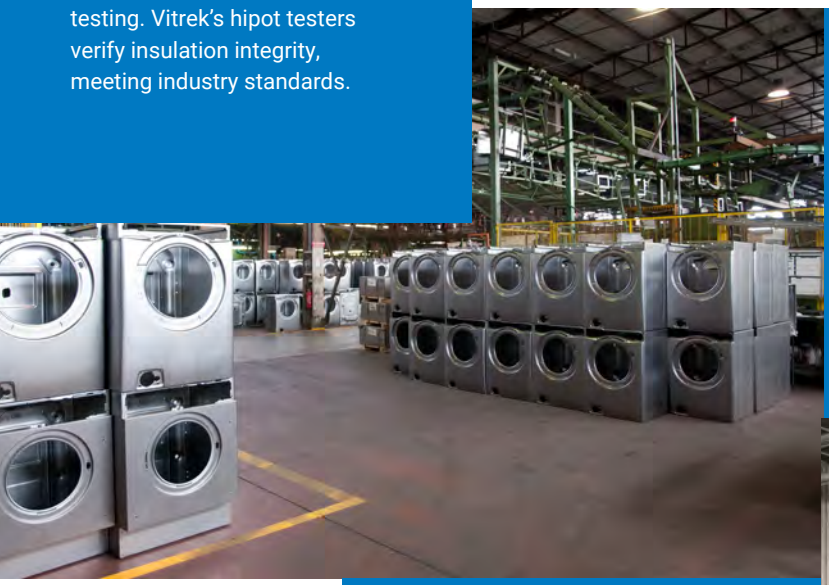
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Our Markets

You'll find Vitrek electrical testing systems at work around the world and across a wide range of applications and industries, from consumer appliances and medical equipment to military, aerospace and technical labs.

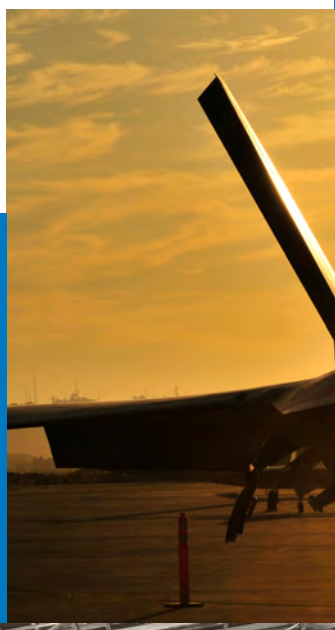
APPLIANCES

Modern appliances require electrical safety and compliance testing. Vitrek's hipot testers verify insulation integrity, meeting industry standards.



AEROSPACE AND MILITARY

Vitrek provides high-accuracy testers and analyzers tailored for military and aerospace applications, including 400 Hz and 800 Hz power systems. Products support compliance and are widely used in global test labs.



AUTOMOTIVE

Electric and hybrid vehicles use high-voltage systems that demand precise measurement. Vitrek's high-voltage meters and hipot testers ensure insulation and system safety.



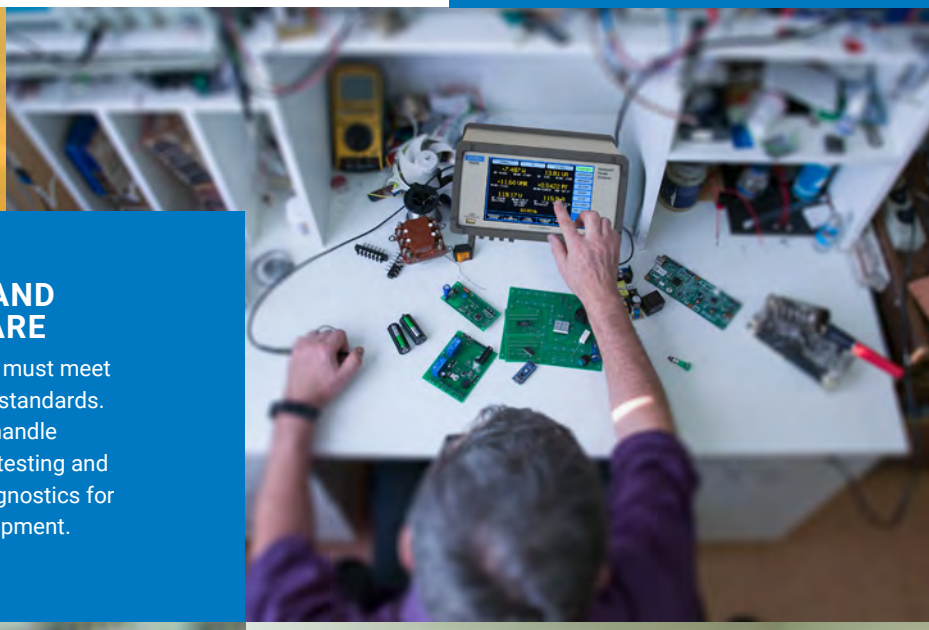
MANUFACTURING

Manufacturers of electronics, appliances, vehicles and medical devices rely on Vitrek for accurate electrical safety and performance testing in regulated, highly competitive markets.

CALIBRATION AND R&D

Vitrek's hipot testers and high-voltage meters are essential tools in calibration labs and R&D departments. We offer ISO 17025-accredited calibration services at our Lockport, Illinois facility.

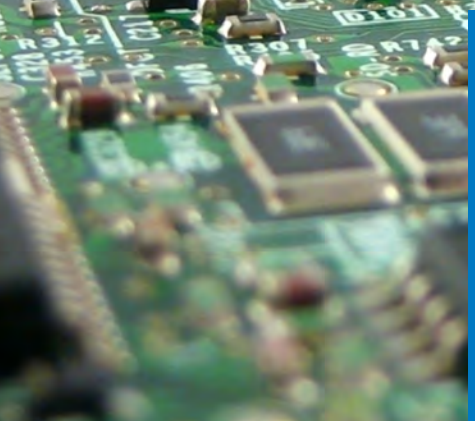




MEDICAL AND HEALTHCARE

Medical devices must meet stringent safety standards. Vitrek's testers handle leakage current testing and high-voltage diagnostics for radiological equipment.







ELECTRONIC EQUIPMENT

Vitrek's hipot testers and power analyzers help ensure compliance with international electrical safety and emissions standards, particularly for power supplies, drives, and similar devices.

Vitrek Solutions in Action

From government agencies and world-class universities to global industry leaders, Vitrek's customers rely on our technology for precision and performance. Many integrate our products as OEM components into their own testing products and services. These are just a few real-world examples showing how we deliver safety, compliance, accuracy, and efficiency—while keeping cost under control.

XP Power

HIGH VOLTAGE METERS

XP Power conducts internal testing of its high voltage power supplies (up to 60 kV) as well as R&D testing with Vitrek's high voltage meters, hipot testers and 964i switching system.

VITREK 4700 HIGH VOLTAGE METER

Vitrek is specified by the U.S. government Department of Defense not only for high performance, but because our products are shipped with calibration certification from our ISO-17025 accredited facility. Most recently, DFAS-Columbus replaced their resistive dividers with Vitrek products for comparable accuracy at a lower cost.

axcelis

VITREK 4700 HIGH VOLTAGE METER
HVL70 HIGH VOLTAGE PROBE

The Vitrek 4700 high voltage meter and high voltage extender smart probe are embedded as OEM components within axcelis' Ion implantation systems for high-performance semiconductor manufacturing.

VITREK HIPOT TESTERS - V7X & 95X

SubZero uses Vitrek hipot and ground bond testing to ensure accuracy and functionality of its global, luxury appliances on the production line.

VITREK 95X HIPOT TESTER WITH AC30 - 30 KV OUTPUT OPTION

As a manufacturer of semiconductor testing systems, Teradyne integrates the Vitrek 95X Hipot tester with AC30-30 kV Output Option as an OEM component to ensure high voltage output and device accuracy.

POWER ANALYZERS, HIPOT & GROUND BOND TESTERS, HIGH VOLTAGE METERS

UL, a leader in consumer product safety testing, relies on a wide range of Vitrek products to back its certification power analyzers, hipot and ground bond testers, and high-voltage meters.

VITREK 95X & V7X HIPOT & GROUND BOND TESTERS

As one of the most well-known brands in the world, GE maintains its reputation by testing the reliability and safety of both its home appliance and lighting divisions with Vitrek Hipot and Ground Bond Testers.

VITREK 95X HIPOT & GROUND BOND TESTERS

Vitrek helps Boeing and other Tier 1 aviation suppliers meet critical test and validation requirements, thanks to the 95X's 400 Hz AC voltage withstand testing for more effective analysis.

VITREK 95X HIPOT & GROUND BOND TESTER WITH 964i SWITCHING SYSTEM

Volex manufactures power charging cables for Tesla EVs worldwide. Vitrek provides the unique capabilities to fit their need for ultra-low contact resistance and high voltage isolation.

VITREK 95X HIPOT & GROUND BOND TESTER AND 964i SWITCHING SYSTEM

Medtronic, one of the world's top medical device manufacturers, includes Vitrek products in its multi-point test system because of their flexibility and multi-point switching features for improved compliance, safety and accuracy.

VITREK V7X & 964i SWITCHING SYSTEM

Eaton relies on Vitrek V7X hipot testers to verify the insulation integrity and electrical strength of its bus bars, critical for power distribution product manufacturing. They use Vitrek's 964i switching system for quick and easy switching for multi-phase applications while ensuring accuracy and reliability.

VITREK V74 HIPOT & GROUND BOND TESTER

Known internationally for its thorough review process, TÜV-SÜD testing and certification service chose Vitrek products for their accuracy, affordability, and compact size ideal for in-field testing.



High Performance at an Entry-Level Price

The V7X sets a new standard for performance and value, combining advanced DSP technology with an intuitive LCD touchscreen for faster, easier, and more reliable results—all in a compact, durable package.

APPLICATIONS:

- Consumer Product Safety Testing
- Production-line Hipot & IR Testing
- Transformer & Component-level Dielectric Testing
- Industry Testing: lighting, medical, auto/EV, mil-aero, semiconductor

Made in the U.S.A.

2-year standard warranty

Advanced HV Electrical Testing

- High voltage capability for demanding hipot testing
- Reliable current sourcing for safe and stable tests
- Robust ground bond testing with high precision for low-resistance paths
- Sensitive arc detection for small discharge events

Accurate, Efficient—and Fast

- 100 nano-Amp leakage resolution
- Stable voltage accuracy under load
- Internal self-test verifies current accuracy
- Rapid ~100ms minimum test duration

Industry-Leading Safety

- Breakdown ~ 150µS
- Ground fault interruption
- Safety Fault Interlock (SFI™) high-speed HV shutdown ~1 ms

Integrated and Automation-Ready

- Stores extensive customizable sequences and steps
- Multiple connectivity options
- Multi-channel testing with Vitrek 964i HV Scanners
- Compatible with Vitrek QT Insite Automated Testing Software

Intuitive, Economical Design

- User-friendly 4.3" color touch display
- Rugged, compact and fan-free
- Lightweight and easy to transport
- 2-year calibration intervals reduce maintenance costs

TEST FUNCTIONS BY MODEL

	V70	V71	V73	V74	V76	V77	V79
AC Hipot	●	●	●	●	●	●	
DC Hipot		●	●		●	●	
Insulation Resistance			●	●	●	●	
Ground Bond				●		●	●
Low Resistance	●	●	●	●	●	●	●
24-Channel Scanner					●	●	

TECHNICAL SPECIFICATIONS

AC Hipot

Output Voltage:	10–5000 V RMS, 50/60 Hz (V76 and V77 max 2500 V)
Accuracy:	±1% of setting +5 V (no load to full load)
Resolution:	1 V
Max Load Current:	20 mA RMS
Leakage Current:	±1% of reading +5 µA, 1 µA resolution

DC Hipot

Output Voltage:	20–5000 V (V76 and V77 max 2750 V)
Accuracy:	±1% of setting +5 V
Resolution:	1 V
Max Load Current:	10 mA
Leakage Current:	±1% of reading +1 µA, 0.1 µA resolution

Insulation Resistance (IR)

Test Voltage:	20–5000 V DC (V76 and V77 max 2750 V)
Accuracy:	±2.5% of setting +5 V
Resolution:	1 V
Max Charge Current:	5 mA auto
Max Capacitive Load:	2 µF
Resistance Range:	150 kΩ – 450 GΩ (90 MΩ/V)
Accuracy by Range:	2% (<5% max IR) 5% (<13% max IR) 10% (<30% max IR) 20% (>30% max IR)
Resolution:	0.1% of value
Min/Max Limits:	Configurable per step

Low Resistance

Range:	0 Ω – 60 kΩ
Accuracy:	1.5% +0.015 Ω (<13 Ω), 3% +1 Ω (<1 kΩ), 5% (<13 kΩ)
Resolution:	0.001 Ω
Min Test Time:	60 ms
Method:	2-terminal, 10.5 mA / 4.15 V max
Resistance Offset:	Universal lead/fixture offset applicable

Ground Bond (if equipped)

Test Current:	1–30 A RMS (42 A peak), 50/60 Hz
Accuracy:	±2.5% +10 mA
Resolution:	0.01 A
Compliance Voltage:	>4.5 V RMS (6 V peak)
Measurement Method:	4-wire Kelvin
Resistance:	Max 4.5 Ω (dependent on compliance voltage)
Accuracy by Current:	2.5% +3 mΩ (<2 A), 2 mΩ (<6.5 A), 1 mΩ (other)
Resolution:	0.1 mΩ (>6.5 A), 1 mΩ (other)
Resistance Offset:	Universal lead/fixture offset applicable

GENERAL SPECIFICATIONS

DSP Measurement	40,000 samples/sec for output control and parameter measurement
Display	4.3” color touch LCD
Interfaces	USB 2.0, RS232, Contact Closure Digital I/O with Safety Interlock (Scanner Control port N/A on V76 and V77)
Accessories Included	Alligator test leads for hipot/continuity (TL 209) 4-wire alligator leads for GB units (K-2R)



More Power. More Speed. More Capability.

The larger yet lightweight 95X handles higher voltages, higher currents, and fine-resolution measurements for the most demanding Devices Under Test (DUTs).

APPLICATIONS:

- Appliance & Tools End-of-Line Safety
- Cable Assemblies, Harnesses & Connectors
- Power Distribution Dielectric Testing
- EV Components HV Stress Testing
- LED Drivers, Lighting Ballasts & Fixtures
- Medical Electrical Equipment Safety

Made in the U.S.A.

2- year standard warranty

Maximum Operator Safety

- GFI high-speed shutdown, Safety Fault Interlock, Test Lead Safety Sense
- Recessed switch prevents accidental activation

High Power, High Voltage Capability

- Up to 50 mA DC sourcing current
- Improved drive capability for higher throughput
- Voltage range up to 15 kV DC / 10 kV AC
- Optional 30 kV AC output using an external module (AC-30)

Fastest Hipot Testing Available

- Ramp rates (up to 50 kV/second)
- Up to 100 tests/second

Advanced Measurement

- Measures total, in-phase, and quadrature components
- Results for in-phase resistance, quadrature reactance, capacitance, dissipation factors

Complementary Ground Bond Testing

- Available in three 95X models
- Output currents from 100mA to 40 Amps RMS

Pico-Amp Leakage Measurement

- Detects even the lowest current levels
- Stable, precise tera-ohm-range IR readings

Versatility and Flexibility

- Expansive test sequence memory
- VICL interface control of 964i

FUNCTION AND VOLTAGE BY MODEL

	951i	952i	953i	954i	955i	956i	957i	959i
AC Voltage Testing	20-6000V	20-6000V	20-6000V	20-6000V	40-10500V	—	20-6000V (40-10500V Opt AC10)	—
DC Voltage Testing	30-6500V	30-6500V	50-11000V	50-11000V	50-11000V	30-6500V	75-15000V	—
AC Low Resistance Testing	—	0.1-40A @ 8V	—	0.1-40A @ 8V	—	—	— (0.1-40A Opt GB40)	0.1-40A @ 8V

TECHNICAL SPECIFICATIONS

Measurement Precision and Accuracy

DC Voltage Resolution & Accuracy — 0.1 V up to 999.9 V, 1 V above; 0.25% + 0.5 V

AC Voltage Resolution & Accuracy — 0.1 V up to 999.9 V, 1 V above; 0.25% + 1.5 V (+ 0.01% per Hz above 100 Hz)

DC & AC Leakage Current Resolution & Accuracy — Down to 100 pA; DC: 0.25% + 0.5 nA; AC: 0.5% + 10 nA

Insulation Resistance (IR) Accuracy by Voltage — Detailed table for max resistance per test voltage (50 GΩ → 4 TΩ, 957i up to 6 TΩ)

Accuracy by Range — 100 µΩ → 150 kΩ, 0.5% + 0.002 Ω up to 30 kΩ, 1.5% above 30 kΩ, 5% above 100 kΩ

Advanced Test Features

Ramp & Dwell Flexibility — 0.01 s → 9999 s or 0.1 → 50,000 V/sec; min/max limits selectable

Multi-Step Test Memory — 100 sequences × 100 steps (up to 1000 steps), stored non-volatile for 20+ years

Multi-Mode IR — End-on-pass, end-on-fail, end-on-timer

Multi-Dwell / Ramp High — Dwell Low Limits for advanced dielectric testing

AC Phase Measurement — Total RMS, in-phase, quadrature (0.01° per Hz accuracy)

Arc Detection — Test-specific, dual parameter (amplitude & pulse width limits per test)

Ground Bond / Ohmmeter

Ground bond — 40 A RMS max, resolution 0.001 A, frequency 40–500 Hz

Compliance voltage — 6.5 V RMS, voltage sense 0–8 V, 4-terminal Kelvin

Resistance range — 6.5 Ω @ 1 A → 162.5 mΩ @ 40 A, max load impedance 10 Ω

GENERAL SPECIFICATIONS

Arc Detection — Dual-parameter limits (2–20 mA peak; 4–30 µs pulse width).

Interfaces — Ethernet (high-speed, noise-immune)
RS232 (9600–115200 baud)
Two VICL ports for HV scanner/950i control
Digital I/O: 8 inputs, 5 outputs (Start/Stop, Pass/Fail, HV Present, etc.)
Optional GPIB (GP-9 module)

Test Lead Safety Sense (TLSS™) — Continuous verification of lead connection during HV, 4-wire low-ohms, and ground-bond tests.

Real-Time Clock — ±10 sec/day accuracy; 30-day battery backup.

Memory — Up to 100 test sequences (max 1000 steps); 20-year retention; 1,000,000 write cycles.

Dwell Time Accuracy — 0.05% + 20 ms; digital output for verification.

Environmental — Operating Temp: 0–50 °C
Humidity: ≤90% RH (0–40 °C)

Power — 110–260 VAC, 50–60 Hz, 500 VA max.

Dimensions — 89 × 432 × 457 mm (3.5” × 17” × 18”)

Weight — 951i/953i/959i: 9 kg (18 lb) net; 18 kg (25 lb) shipping 952i/954i/955i: 14 kg (28 lb) net; 18 kg (35 lb) shipping

Accessories — Alligator test leads, power cord, NIST-traceable calibration certificate (no data). Optional: ISO 17025 calibration with data.

V10X SERIES HIPOT TESTERS



Advanced User Experience in a Powerful, Future-Ready Tester

Modern touchscreen, multi-test capability, and automation architecture for the most demanding testing challenges.

APPLICATIONS:

- Appliance & Tools End-of-Line Safety
- Cable Assemblies, Harnesses & Connectors
- Power Distribution Dielectric Testing
- EV Components HV Stress Testing
- LED Drivers, Lighting Ballasts & Fixtures
- Medical Electrical Equipment Safety

Made in the U.S.A.

2-year standard warranty

Smart Interface & Integrated Reporting

- Easy, graphical touchscreen interface with intuitive test creation, real-time chart visualization, and fast result review
- Built-in documentation tools to generate PDF reports and export CSV data

Connectivity & Automation Ready

- Network-enabled architecture with Ethernet, WiFi, and embedded web interface for remote access and Industry 4.0 workflows
- SCPI-compliant interfaces including LAN, USB, RS232, Digital I/O, and optional GPIB

High-Performance Output & Speed

- High power drive capability up to 50mA DC plus optional 100mA and 200mA AC output
- Wide voltage range up to 15 kV DC and 30 kV RMS AC with 400 Hz support
- DSP-based architecture with optimized ramp profiles and sequence chaining

Highest Safety & Fault Protection

- Multi-layer protection with GFI, SFI™, and TLSS™ for continuous monitoring and rapid shutdown
- Configurable broadband arc detection for improved breakdown sensitivity

Precision Measurement & Accuracy Control

- Pico-amp leakage measurement for stable tera-ohm insulation resistance readings
- Automatic fixture and cable compensation with phase angle measurement

Advanced Test Control & Flexibility

- Multi-mode IR testing with variable DC output from 20V to 15 kV
- Multi-dwell and ramp/dwell limits with large sequence memory support

CAPABILITIES	V101	V102	V103	V104	V105	V106	V107	V108	V109
AC Hipot									
Voltage Range	20 V–6 kV	20 V–6 kV	20 V–6 kV	20 V–6 kV	50 V–10 kV	50 V–10 KV	50 V–10 KV	50 V–10 KV	–
Max Std Current	50 mA	50 mA	50 mA	50 mA	30 mA	30 mA	30 mA	30 mA	–
500VA Option	100 mA	100 mA	100 mA	100 mA	–	–	–	–	–
2 kV Max Option (AC-2)	200 mA	200 mA	200 mA	200 mA	–	–	–	–	–
30 kVAC External Option	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA	–
DC Hipot/IR									
Voltage Range	20 V–6 kV	20V–6 kV	50V–11KV	50V–11KV	50V–11KV	50V–11KV	50V–15KV	50V–15KV	–
Max DC Current	50 mA	50 mA	30 mA	30 mA	30 mA	30 mA	10 mA	10 mA	–
40 A Ground Bond	–	Yes	–	Yes	–	Yes	–	Yes	Yes
4 Wire Ohmmeter	Available with each model; 5-digit resistance measurements with resolution to 100µΩ and range up to 100K ohms.								

TECHNICAL SPECIFICATIONS

Measurement Precision & Accuracy

AC Voltage Accuracy	±0.5% ±1.5 V (typical)
DC Voltage Accuracy	±0.25+/- 1.25 V (typical)
Leakage Current Measurement	Down to 0.1 nA resolution, RMS, in-phase, and quadrature components supported
Phase Angle Accuracy	±0.005° per Hz relative to test voltage

Arc Detection Performance

Arc Current Range	1 mA to 30 mA RMS (50 kHz–5 MHz bandwidth)
Arc Time Resolution	Selectable 4 µs to 40 µs measurement windows
Dual-Parameter Detection	Time and amplitude thresholds configurable per test

Voltage Withstand Capabilities

AC Test Voltage Range	Up to 10 kVrms standard, expandable to 30 kVrms with AC-30 option
Frequency Range	20 Hz to 500 Hz (400 Hz aviation testing supported)
Waveform Quality	Sinewave output with controlled crest factor

Leakage & Breakdown Measurement

Detection	From 1 µA up to 280 mA peak with sub-30 µs detection time
Leakage Current Accuracy	±0.5% typical for isolated DUT measurements
Cable Compensation	Automatic correction for fixture capacitance and lead effects

Test Sequencing & Control

Ramp & Dwell Resolution	Ramp times down to 0.01 s and programmable voltage rate control
Multi-Dwell Operation	Programmable voltage steps without returning to zero
High-Speed Sequencing	Supports chained test execution without discharge between compatible steps

Ground Bond & Low Resistance Testing

Ground Bond Current	Up to 40 A RMS output capability
Resistance Measurement Range	Milliohm-level resolution with 2-wire and 4-wire Kelvin modes
Automatic Lead Compensation	Removes fixture resistance error

GENERAL SPECIFICATIONS

Dimensions	132 mm H × 432 mm W × 457 mm D (5.2" × 17" × 18")
Weight	9 kg (18 lb) net; varies by model and installed options
Operating Temperature Range	0°C to 50°C operating <85% RH (non-condensing)
Humidity	Altitude: up to 7,000 ft standard operation
Power	105–265 Vrms (45–450 Hz) standard
Capacity	Minimum 500 VA (750 VA with high-power option)
Data & Memory	Up to 100 test sequences with 1,000+ steps. Non-volatile storage with 20-year memory retention. Onboard PDF generation and CSV export
Interfaces	Ethernet LAN, USB Host Port, RS232 Interface, Digital I/O, Optional GPIB Interface

Accessories & Optional Interfaces

Rear Terminal Option (RPO)	Adds rear panel terminals in parallel with front panel connections
Rear Terminal Replacement (RPOO)	Rear-only terminal configuration for fixed installations
GPIB	IEEE-488 communication interface for legacy automation systems
QT Insite	Vitrek's PC-based HIPOT automation software platform
Rack Mount Kit	Enables standard 19" rack installation

964i HIGH-VOLTAGE SWITCHING SYSTEM



Automated, Rapid Multi-Point Hipot Testing

Whether it's an 8-pin connector, 64-conductor cable, or a tray of SMD capacitors, the 964i automatically routes multiple test points to a Vitrek hipot tester. A repeatable switching system with no operator involvement.

APPLICATIONS:

- Aerospace & Defense Testing
- Automotive & EV Component Integrity
- Consumer Electronics & Appliances Production
- Manufacturing QA
- Medical Device Safety Testing
- Research & Development, Prototyping
- Testing Complex Cable & Wire Harnesses

Made in the U.S.A.

2- year standard warranty

CE

Unmatched Efficiency & Flexibility

- Multi-point, multi-conductor testing in a single compact unit
- Eight 8-channel cards for up to 64 test points
- Choose voltage ratings (3 kV, 7 kV, 10 kV, 15 kV) and input configurations (+HV bus or return bus)
- Modular design with relay board options (HV, LV, or HC) for specific applications

High Voltage & Current Capability

- Supports demanding test requirements
- Voltage switching up to 15,000 V
- Current switching up to 70 A

Seamless Integration

- Connects directly to Vitrek's 95X or V7X Series Hipot Testers
- Up to 60 rear terminals link with your DUTs
- Control up to 4 units directly from the hipot tester or 10 units via PC and built-in RS232 or optional GPIB interface

Smarter, Safer, Faster

- Intuitive LCD display provides lives status updates and switch confirmations
- Automated routing eliminates manual reconfigurations, switching errors and HV exposure
- Up to 999 sequential tests at 0.025-second reconnect speeds

Automated Data Collection

- 964i Integrates with Vitrek QT Insite test control software
- Remote programming, test sequencing, and barcode-triggered tests
- Real time test and device status monitoring from one interface

RELAY BOARD OPTIONS AND ELECTRICAL SPECIFICATIONS

	HV Series (HV7 / HV10 / HV15)	LV Series	HC Series – High Current	HC Series – Low Current
Max Voltage (connections)	HV7: 7 kVDC 5 kVAC HV10: 10 kVDC 7 kVAC HV15: 15 kVDC 10 kVAC	3 kVDC / 2 kVAC	1.5 kVDC / 1 kVrms	1.5 kVDC / 1 kVrms
Max Voltage (to ground)	7 / 10 / 15 kVDC (5 / 7 / 10 kVAC)	5 kVDC / 3 kVAC	1.5 kVDC / 1 kVrms	1.5 kVDC / 1 kVrms
Frequency	<500 Hz	<500 Hz	<500 Hz	<500 Hz
Min Switching Current	<1 mA	<1 mA	>0.5 Arms	<1 mA
Contact Resistance	<0.1 Ω (comp.)	<0.05 Ω (comp.)	<0.025 Ω	<0.05 Ω (comp.)
Leakage Resistance (connections)	>1TΩ at <30C	>1TΩ at <30C	>20MΩ	>100GΩ
Leakage Capacitance (to ground)	15 pF	15 pF	—	15 pF
Leakage Capacitance (common → ground)	50 pF	50 pF	—	50 pF
Leakage Capacitance (between connections)	5 pF	10 pF	—	10 pF
Thermal EMF	<1 mV	<200 µV	—	<100 µV
Coil Power (hold)	0.3 W	0.12 W	0.6 W	0.6 W
Coil Power (close)	1.25 W (5 ms)	0.5 W (5 ms)	2.5 W (25 ms)	0.25 W (5 ms)
Expected Life (operations)	500,000	2,000,000	500,000	5,000,000

GENERAL SPECIFICATIONS

Relay Card Capacity	Eight cards
Front Terminals	6
Rear Panel Terminals	60
Interfaces	RS232 VICL (Vitrek Hipot Control) GPIB optional
Nominal Dimensions	89mmH x 432mmW x 457mmD (3.5” x 17” x 18”)
Nominal Weight	Mainframe only 3.5Kg (8lb) net, 7Kg (16lb) shipping. Add 0.75Kg (1.5lb) per relay card
Storage Environment	-20 to 75C (non-condensing)
Operating Environment	0 to 50C, <85% RH (non-condensing), Pollution Degree 2
Operating Altitude	0 to 10000 ft ASL
Line Power	105-265Vrms, 45 to 450 Hz, Category II using provided external power module



Industry-Leading High Resistance Measurement

Most insulation resistance (IR) testers are no match for today's high efficiency applications. Only the 98X series delivers high voltage outputs, capacitive load capability, and versatile features for optimal electronic performance.

APPLICATIONS:

- Aerospace and Defense
- Automotive & EVs
- Consumer Electronics
- Electrical Manufacturing & Power Distribution
- Medical Device Manufacturing
- Motors, Drives & Industrial Equipment
- Renewable Energy
- Research & Development

Made in the U.S.A.

2- year standard warranty

CE

Higher-Voltage Testing with Confidence

- Highest range of IR test voltages
- 6.5 kVDC (981i) or 11 kVDC (983i) for demanding insulation applications

Faster IR Test Results

- High-speed output control delivers dwell times as low as 100 ms
- Rapid test throughput

High-Resistant Measurement Range

- Up to 150 Teraohms with picoamp leakage sensitivity
- Highly stable and precise insulation-quality evaluation

Complex Dielectric Testing

- Multi-dwell capability: apply multiple voltages in one sequence without returning to zero
- Simplifies advanced analysis of dielectric properties

Unique Capacitive Test Modes

- Handle capacitive loads that other IR testers can't
- Optimized for cables, PV panels, & other high-capacitance devices

Expanded Testing Flexibility

- Continuously variable output with 1-volt resolution from 30V–6.5 kV or 60V–11 kV with no fixed presets
- Four IR test modes: timed, pass/fail, steady-state, and rising-voltage
- Measure IR on grounded loads

Scale Up for Complex or Multi-Conductor DUTs

- Control up to four 64-channel HV scanners (256 points)
- Eight 8-channel cards (7, 10, or 15 kV) using the 964i HV Switching System

RESISTANCE MEASUREMENT AND VOLTAGE BY MODEL

	981i	983i
DC Output Voltage	30V – 6500V ±(0.25% rdg + 0.1V)	60V – 11000V ±(0.25% rdg + 0.2V)
Output Resolution / Loading	1V; up to 4mA charging, 2mA continuous	1V; up to 4mA charging, 2mA continuous
Current Measurement	RETURN current only, 1pA – 4mA	RETURN current only, 1pA – 4mA
Test Accuracy	Resistive ≤1000pF: ±(0.5% rdg + 10pA + 2pA/kV)	Resistive ≤1000pF: ±(0.5% rdg + 10pA + 2pA/kV)
Chart Accuracy Formulas	Resistive: ±(0.4% rdg + (R/(1TΩ per kV))% rdg + (10/V)% rdg + 20Ω/kV) for R <50TΩ Capacitive 1–50nF: ±(0.5% rdg + …) Capacitive >50nF: ±(0.6% rdg + …)	Resistive: ±(0.4% rdg + (R/(1TΩ per kV))% rdg + (20/V)% rdg + 40Ω/kV) for R <50TΩ Capacitive 1–50nF: ±(0.5% rdg + …) Capacitive >50nF: ±(0.5% rdg + …)

Note: OFFSET (ZERO) in Auto or Manual modes is optional and allows users to compensate for external leakages.

GENERAL SPECIFICATIONS

Interfaces
Ethernet: High speed, high noise immunity LAN interface
RS232: Selectable baud: 9600, 19200, 38400, 57600 or 115200, full handshake
VICL: Provided for control of HV Scanners
Digital I/O: 4 digital inputs and 5 digital outputs. Functions include, Start/Stop, Testing, Pass/Fail, HV Present, Safety Interlock, Dwell Timer
Optional GPIB interface

Operating Temperature 0°C to 50°C

Humidity <85% RH (non-condensing)

Power 105-265 Vrms, 45-65 Hz, 500 VA Max

Dimensions 89 mm H x 432 mm W x 457 mm D (3.5" H x 17" W x 18" D)

Weight 5 Kg (11 lb) Net / 7 Kg (15 lb)

Accessories Included Alligator test leads, NIST traceable certificate with no data, power cord, and operator's manual. Limited ISO 17025 calibration certification with data & uncertainties available.

4700 PRECISION HIGH VOLTAGE METER



Highest HV Measurement Accuracy

The 4700 offers direct, lab-grade AC and DC measurement accuracy up to 10 kV (extendable) without the need for delicate reference dividers. Exceptional, reliable precision in a rugged, compact and easy-to-use meter.

APPLICATIONS:

- HV Safety & Measurement
- Fault Detection
- Renewable Energy Management
- Research & Development
- System Voltage Monitoring
- High-Voltage Calibration

Made in the U.S.A.

2- year standard warranty

CE ISO

High-Voltage Measurement— Direct or SmartProbe™

- Measure up to 10 kV directly, or extend to 35, 70, 100, or 150 kV with a Vitrek SmartProbe™
- SmartProbe auto loads data for instant readings
- Dual inputs support differential or phase-to-phase HV measurements
- Optional G-Series high-impedance probes enable electrostatic voltmeter applications

Accuracy for Precision-Critical Environments

- 0.03% DC accuracy and 0.1% True RMS AC
- Up to 60 DSP-filtered readings per second for stability
- 78 dB AC noise rejection delivers clean, 6-digit DC measurements
- True RMS AC measurement for VLF through aviation-frequency testing

Smarter, Faster Measurement Experience

- Color touch screen simplifies data visualization; tilt for optimal viewing angle
- Simultaneous AC and DC voltage readings for complete insight
- Chart Mode documents drift, ramp time, overshoot, and sag
- Optional battery pack provides up to 11 hours of operation (BP-47)

Automation & Connectivity Built In

- Standard Ethernet, high-speed serial, and USB printer port; GPIB optional
- Fully programmable for automated test scripts, data logging, and remote operation
- Capture hardcopy plots instantly to document HV events or test behavior

Compact & Rugged

- 100% silicone-protective front and rear bumpers
- Crushproof steel case forms Faraday shield for noise immunity

MAXIMUM VOLTAGE & INPUT IMPEDANCE

	Max DC Voltage	Max AC Voltage (rms)	Input Impedance	DC Accuracy	Resolution	AC Accuracy	Resolution	Self-Heating Specification
Direct Input (Meter)	10 kV	10 kV	110 MΩ	0.03% + 0.03 V	10 mV	0.12% + 0.1 V	10 mV	1.5 ppm of reading per kV²
HVL/P-35	35 kV	30 kV	200 MΩ	0.035% + 0.07 V	100 mV	0.1% + 0.2 V	100 mV	0.4 ppm per kV²
HVL-35G	35 kV	—	10 GΩ	0.25% + 1.5 V	1 V	—	—	—
HVL-70	70 kV	50 kV	400 MΩ	0.04% + 0.2 V	1 V	0.1% + 0.4 V	1 V	0.14 ppm per kV
HVL-70G	70 kV	—	20 GΩ	0.35% + 3.5 V	1 V	—	—	—
HVL-100	100 kV	75 kV	600 MΩ	0.05% + 0.3 V	1 V	0.1% + 0.6 V	1 V	0.14 ppm per kV²
HVL-100G	100 kV	—	30 GΩ	0.5% + 15 V	10 V	—	—	—
HVL-150	140 kV	100 kV	1 GΩ	0.08% + 0.7 V	10 V	0.5% + 1 V	10 V	0.2 ppm per kV²

Note: G-series probes do not display AC—these are high-impedance DC probes.

GENERAL SPECIFICATIONS

AC/DC Voltage Measurement Resolution
Selectable 4, 5, or 6 digits

Measurement Functions
DC Voltage, True RMS AC Voltage, Ripple, Peak to Peak, Crest

Factor & Frequency Measurement
(4 digits 0.01 Hz to 600 Hz)

Measurement Time
Selectable down to 16mS (60 readings per sec.)

Maximum Input to Common Terminal
3 kV, Peak for 1 sec, no damage

Accuracy
Valid one year ± 5C from Cal temperature

Environmental
Operating Environment 0 to 50C, <85% RH (non-condensing)

Dimensions
218mm (8.5”) wide x 130mm (5”) high x 253mm (10”) deep, nominally

Weight
2.4kg max (4kg shipping)

Power
AC Source 45 to 450 Hz, 100 to 265Vrms at <15W (20VA) using supplied external power
DC Source 11 to 16Vdc at <1.2A, using a center positive 2.5mm DC power connector
BP-47 Battery Option – up to 11 hrs of continuous operation

Accessories
ISO 17025 calibration certification with data and uncertainties, direct input test leads, chassis ground lead, operator’s manual, and external power supply.
HVP series probes include a detachable probe tip and the HVL series includes a toroid corona shield.

DL SERIES DC ELECTRONIC LOAD



Push Power to its Limits with Easy, Safe Control

The DL Series delivers precision, speed, and effortless usability for testing power supplies, batteries, LED drivers, and more. High-accuracy measurements and fast transient loading deliver reliable, real-world insights.

APPLICATIONS:

- Automotive & Aerospace Applications
- Battery & Charger Testing
- Industrial & Telecom Power Systems
- LED Driver & Lighting System Testing
- Power Supply Testing
- Quality Control
- Renewable Energy Testing
- Research & Development

Made in the U.S.A.

2- year standard warranty

Easiest-to-Use

- Full-color LCD touchscreen enables fast setup and configuration
- Intuitive interface eliminates complex programming
- Built-in comprehensive self-test ensures all circuits function properly
- Compact design for bench or rack set up, multiple connectivity options

Exceptional Performance

- Delivers ±0.05% voltage and current accuracy, even at low loading levels
- Supports pulse and sweep steps as short as 20 µs
- Outperforms typical DC loads with >10:1 better accuracy at low loads; >2:1 at high loads

Flexibility for Diverse Applications

- Handles kW, W, mW, and µW loads with a 20:1 higher and 1000:1 lower loading range than standard loads
- Ideal for testing batteries, LED drivers, chargers, and power supplies
- Multiple models and configurations available

Advanced Transient & Non-Linear Load Capabilities

- Provides transient, wide-band, non-linear loading from 125 W to 500 W
- Supports high-speed pulsed loading up to 100 kHz
- Configurable rise/fall edge controls and soft-start loading
- Sweep capability for detailed performance characterization

Real-World Load Simulation

- Simulate demanding real-world or dynamic operating conditions
- Create arbitrary loading sequences with up to 100 programmable steps
- Wide bandwidth loading supports complex behaviors beyond static loads

Superior Visibility & Built-In Analysis

- Integrated scope for viewing real-time voltage and current waveforms without external equipment
- X/Y plotting displays V-I and V-P curves using swept loading
- Historical data logging (graphical and numerical)

FUNCTION AND VOLTAGE BY MODEL

	DL115	DL215	DL515	DL150	DL250	DL550
Voltage Range (Min–Max)	0–150 V	0–150 V	0–150 V	0–500 V	0–500 V	0–500 V
Current Range (Min–Max)	0.1–21 A	0.1–42 A	0.1–84 A	0.1–21 A	0.1–42 A	0.1–84 A
Rated Power (Continuous)	125 W	250 W	500 W	125 W	250 W	500 W
Min Operating Power	0.2 W	0.2 W	0.2 W	0.2 W	0.2 W	0.2 W
Transient Capacity (Peak)	3.6 kW / 32 A	7.25 kW / 65 A	14.5 kW / 130 A	2.4 kW / 32 A	4.8 kW / 65 A	9.6 kW / 130 A
Dynamic Mode Range	Up to full current	Up to full current	Up to full current	Up to full current	Up to full current	Up to full current
Rise/Fall Time	Fast-load capable	Fast-load capable	Fast-load capable	Fast-load capable	Fast-load capable	Fast-load capable
Operating Modes	CC, CV, CR, CP	CC, CV, CR, CP	CC, CV, CR, CP	CC, CV, CR, CP	CC, CV, CR, CP	CC, CV, CR, CP
Protections	OVP, OCP, OPP, OTP	OVP, OCP, OPP, OTP	OVP, OCP, OPP, OTP	OVP, OCP, OPP, OTP	OVP, OCP, OPP, OTP	OVP, OCP, OPP, OTP

GENERAL SPECIFICATIONS

Dimensions 5 in H × 8.5 in W × 13 in D

Weight Approx. 8lb (unpacked, without external power supply)

Power External 12 VDC, 60 VA power brick

Display 5in diagonal, 800x480 pixel color LCD with touchscreen

Adjustment Wheel Indented encoder provided on front panel allowing for the “live” adjustment of the loading levels or timings.

Rack Mounting Rack mounts kits available for mounting one or two units in a 19in wide rack.

Terminals Front: Sheathed banana 4mm sockets, suitable for up to 30A continuous loading
Rear: Approx. 1in square x 0.06in blade type terminals (fully specified). Safety cover provided.

Voltage Sense Wire entry sprung sockets in rear panel

Environmental Warm Up Time: 20 seconds
Full Specifications: 15 minutes
Temperature: Operating: 0 to +40C, at 10 to 80%RH (non-condensing)
Automatically reduces loading if overheating detected.
Storage: -20C to +70C, at 5 to 95%RH (non-condensing)

Altitude 0 to 2000m AS

Cooling Variable speed forced air. Intake vents on both sides and in the bottom, exhaust vents in the rear.
Specifications valid with any one set of intake vents impeded. At least 6 inches of clear space must be provided behind the rear panel and two inches on the side of intake vents.



PA920, PA910 & PA900

Deep Data Drives Performance and Uptime

Power quality is increasingly critical to reliability and cost control. Our analyzers provide high-speed measurement accuracy, thanks to advanced compensation and the ability to handle even the most demanding waveforms.

APPLICATIONS:

- Consumer & Operational Safety
- Energy Efficiency
- Quality Assurance
- Performance Monitoring & Optimization
- Power Quality Management
- Predictive Maintenance & Troubleshooting
- Research & Development
- Standards Compliance

Made in the U.S.A.

2- year standard warranty

CE ISO Boeing 787B3-0147
Airbus ABD0100.x

Fast, Accurate, and Reliable

- Captures 384 samples per cycle
- 100 measurements/sec with full rated accuracy (500/sec with spec adder)
- Maintains accuracy under lower power factor loads, high-crest factor signals, complex switching waveforms
- All specs valid for 2 years after calibration

Excellent Value for Performance

- Performance comparable to higher-priced instruments
- Built-in harmonics analysis (not a costly add-on)
- Scalable to thousands of synchronized channels
- Swappable multi-channel configurations

Dynamic Functionality

- Use as an oscilloscope or powerscope for voltage, current, and power
- Single phase & multi-channel measurement capability
- Customizable Data Capture

Fully Specified for DC and AC

- Measurement for both DC and AC across voltage and current range
- High-resolution capability down to .1 µA
- Versatile for standard and specialized measurement

FEATURES BY MODEL

	PA920 Ultra-High Accuracy (0.024%)	PA910 High Accuracy (0.045%)	PA900 Precision (0.045%)
Bandwidth	DC to 5 MHz (UT card, up to 2 MHz effective reading; BT card for high-bandwidth signals)	DC to 1 MHz (VT card, typical; VX card for external CT input)	400 Hz (S/A/W cards; W card high-frequency capable)
Harmonics Analysis	Up to 500 harmonics	Up to 500 harmonic	Up to 500 harmonics at 400 Hz
Sample / Reading Rate	384 MSPS effective sampling	384 MSPS effective sampling	384 MSPS effective sampling
Accuracy	0.024% (UT card); 0.045% for BT card	0.045% (VT/VX cards)	0.045% (A-type card)
Measurement Channels	True multi-channel, modular card design (UT, UX, BT, BX, KT, KX, MT)	Modular channel card design (VT, VX, MT)	Modular design (S, A, W, LX, L, MT)
Additional Features	Interchangeable channel cards, Advanced self-heating compensation, Virtual Power Analyzer mode	Industrial and general power analysis	Custom Power Data Screens

GENERAL SPECIFICATIONS (ALL MODELS)

Interfaces
LAN (Ethernet)
Serial (RS232)
USB (Client) and USB (Host – Front Panel) for mass data storage
GPIB Interface Option

Display
7” 800x480 pixel (approx. 0.0075” resolution) 18bpp color LCD with high resolution pressure sensing touch panel.

Power
Installation Category II; 85-264Vrms, 45 to 65 Hz, 40VA max.

Dimensions
137 mm H x 248 mm W x 284 mm D (5.4” x 9.75” x 11.2”) with feet not extended

Weight
3.2 kg (7lb) net, 5 kg (11 lb) shipping

Environmental
Storage: -20 to 75C (-4 to 167F) (non-condensing)
Operating: 0 to 40C (32 to 104F), <85% RH (non-condensing), Pollution Degree 2

Accessories
Operator manual, power cord, NIST calibration certification with no data including all channels. ISO 17025 calibration certification with data is also available. Channel cards include color coded, heavy-duty 1.5 meter alligator-to-banana test leads.

Large color touchscreen for quick setup, measurement configuration, and channel selection.

- In-depth visibility into electrical activity
- Front-panel results screens
- Store data for long periods

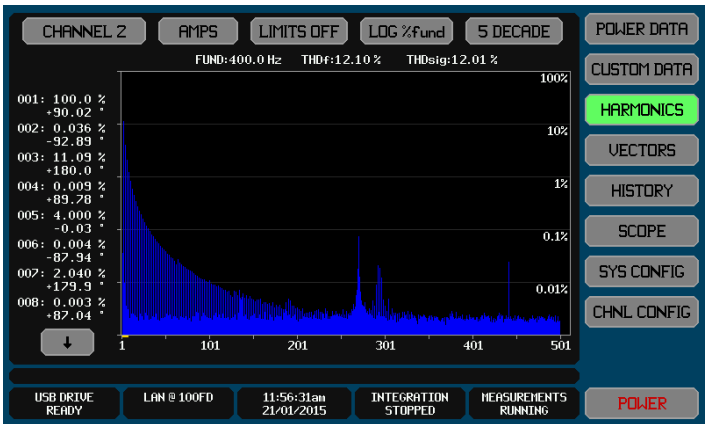


Measurement Display Modes

Vitrek Power Analyzers provide multiple analysis views—including Vector, Scope and Cycle—to help users visualize and diagnose power measurements.

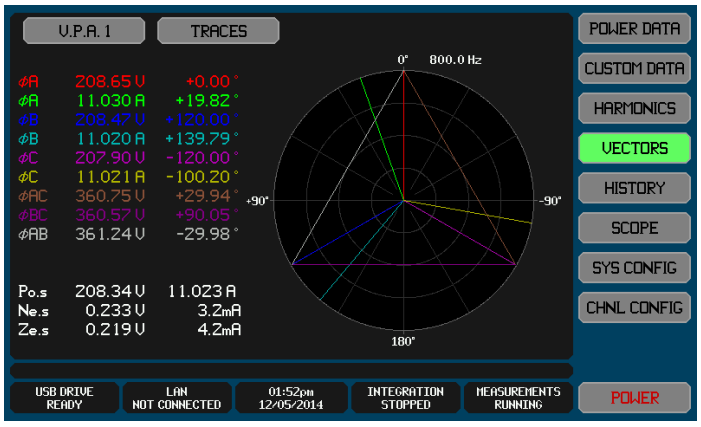
Harmonics Measurement

Displays up to 500 harmonics, with linear, relative-linear, logarithmic, or relative-logarithmic amplitude views.



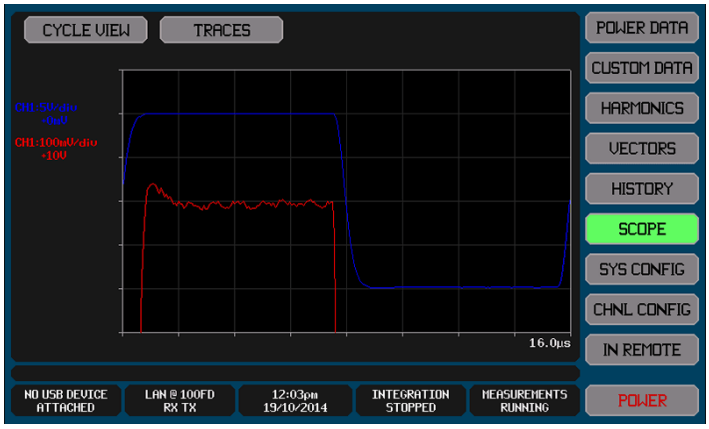
Vector

Visualizes fundamental voltage and current vectors for selected channels.



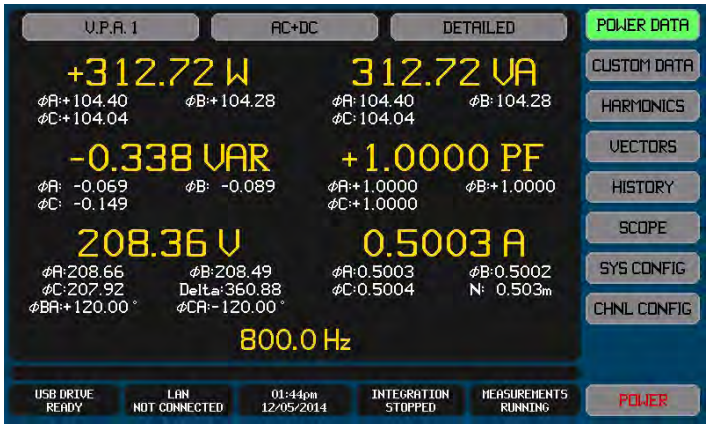
Cycle View

Displays single-cycle waveforms with customizable amplitude and scaling.



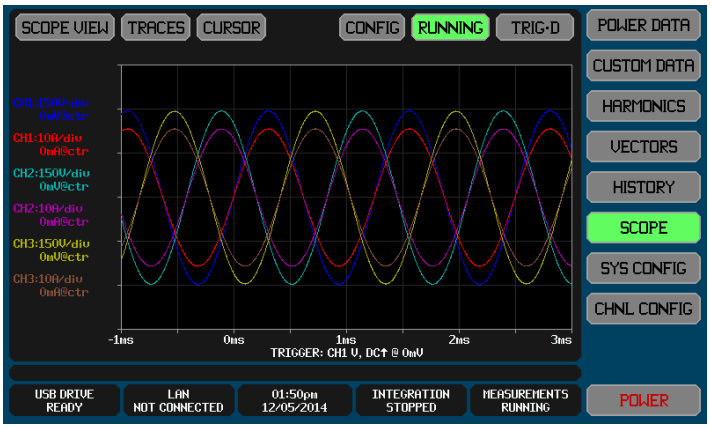
Power Data

One-touch display for V, A, W, VA, VAR, PF, and more.



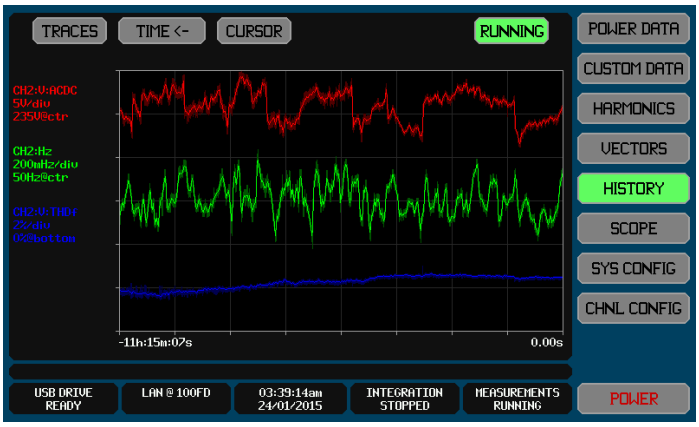
Scope

Waveform acquisition with up to six user-selectable signals.



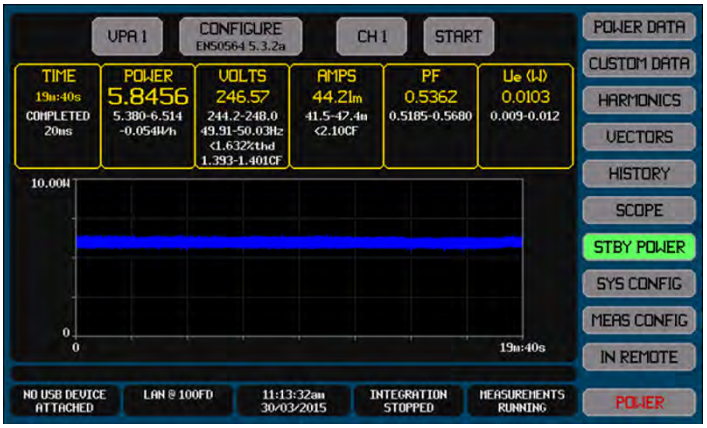
History

Continuous record of measurement results with up to four parameters.



Built-in Standby Power Testing

Complies with EN50564:2011 and starts with a single touch.



Automated Test Data for Exceptional Business Value

QT Insite, part of Vitrek's proprietary Quick Test software series, redefines demanding hipot and IR testing. Turn manual, error-prone steps into a fast, consistent, and highly reliable quality assurance operation that drives accuracy and productivity.

APPLICATIONS:

- Automated Hipot & IR Test Sequencing
- Automated Compliance Reporting, Documentation, Report Generation, Traceability
- Centralized Test Data Management & Archiving
- Engineering Validation & Troubleshooting
- High-volume Production Testing Automation
- Remote, Secure Electrical Safety Test Administration
- Research & Development

Made in the U.S.A.

FREE 45-day trial version available

Faster, Streamlined Test Automation

- Automates multi-step hipot and IR sequences for faster throughput
- Records the results of every test
- Eliminates manual report printing and data export
- Barcode integration speeds up operator workflow
- Reduces setup and execution time with intuitive test profiles

Improved Measurement Accuracy

- Automated sequencing ensures consistent, repeatable testing
- Operator permissions prevent unauthorized or incorrect settings
- Centralized test profiles eliminate variation across stations
- Accurate, raw data capture eliminates manual transcription errors

Easy to Use

- User-friendly interface simplifies setup and test execution
- Reduces operator training time and onboarding effort
- Automated workflows remove complexity from multi-step testing
- Clear permissions and profiles guide operators and prevent mistakes

Strong Data Management & Analytics

- Stores both formatted and raw results automatically
- Searchable, filterable databases accelerate QA investigations
- Highly configurable report formats ensure proper documentation
- Supports both local and shared databases for flexible workflows

Enhanced Efficiency & Visibility

- Remote administration improves multi-station coordination
- Real-time visibility into test progress and results
- Integrates seamlessly with Vitrek testers and switches
- Optimizes resource usage across production lines

Robust Security & Compliance Assurance

- Permission-based access prevents changes that compromise accuracy
- Standardized test sequences support regulatory adherence
- Automated recordkeeping improves audit readiness
- Ensures repeatability across shifts, teams, and global sites

Test Sequence Setup



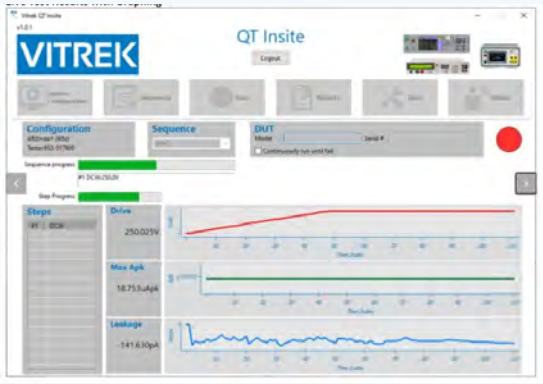
Test Report Database Search



System Configuration Setup



Live Test Results with Graphing



SUPPORTS ALL VITREK HIPOT TESTERS AND SWITCH UNITS

GENERAL SPECIFICATIONS

Operating Systems	Windows 10
	Windows 11
Supported Architectures	x64 (64 bit)
Hardware Requirements	Processor: Recommended minimum 2 GHz or higher
	RAM: Minimum 2 GB (may be higher depending on OS)
	Display: Minimum resolution 1058 × 737
	Network: Required when operating across multiple workstations
Interfaces	GPIB: One or more interfaces with the latest drivers. Only National Instruments adapters are supported.
	RS232: One or more Windows-compatible ports, supporting 9600, 19200, 57600, or 115200 baud. Hardware handshaking required (DTR/DSR and CTS/RTS). USB-RS232 bridges allowed if they support DSR/DTR and CTS/RTS.
	USB: 2.0 or higher
	Network: IPv4 network or direct connection with TCP/IP protocol capabilities

ORDERING INFORMATION

V7x Hipot Testers

ITEM	DESCRIPTION	ITEM	DESCRIPTION
V70	AC Hipot Tester	HVW-7	High Voltage Warning Light
V71	AC/DC Hipot Tester	RSS-7	Remote Start Switch
V73	AC/DC/IR Hipot Tester	RSF-7	Remote Start Footswitch
V74	AC/DC/IR/GB Hipot Tester	HC-V7X	Hard Carrying Case with Die Cut Foam
V76	AC/DC/IR Hipot Tester with Built-in Scanner	V7X-230V	Factory Set for 230V Line
V77	AC/DC/IR Scanning Hipot Tester with Ground Bond	QTI-7	QT Insite Software License for V7x products
V79	Ground Bond Tester		

95x Hipot Testers

ITEM	DESCRIPTION	ITEM	DESCRIPTION
951i	6 kV AC/DC/IR/LR Electrical Safety Compliance Analyzer	500VA	500VA Output Option (951i, 953i & 957i only)
952i	6 kV AC/DC/IR/GB/LR Electrical Safety Compliance Analyzer	HSS-1	High Side Current Measurement for Grounded Loads (951i and 952i only)
953i	11 kV DC 6 kV AC/IR/LR Electrical Safety Compliance Analyzer	ISO-CALN-95X	ISO 17025 Accredited Cal Cert (with purchase)
954i	11 kV DC 6 kV AC/IR/GB/LR Electrical Safety Compliance Analyzer	RM-1	Rack Mount Kit
955i	11 kV DC 10 kV AC/IR/LR Electrical Safety Compliance Analyzer	RSS-95	Remote Start Switch
957i	15 kV DC 6 kV AC/IR/LR Electrical Safety Compliance Analyzer	RFS-95	Remote Start Foot Switch
959i	40 A Ground Bond/LR Safety Compliance Analyzer	RS-2	Female to Female Null Modem RS323 (Serial) Cable 6 ft
GPIB-9	Optional GPIB Interface	RPOO-95	Rear Panel Only Output Terminals
AC-2	200 mA 2 kV AC Max Output Option	QTI-9	QT Insite Software
AC-30	30 kV AC External Option		

V10x Hipot Testers

ITEM	DESCRIPTION	ITEM	DESCRIPTION
V101	6 kV AC/ 6kV DC/IR Hipot Tester	V106	10 kV AC/ 11 kV DC/IR /40 A Ground Bond and Hipot Tester
V102	6 kV AC/ 6kV DC/IR /40A Ground Bond and Hipot Tester	V107	10 kV AC/ 15 kV DC/IR Hipot Tester
V103	6 kV AC/ 11kV DC/IR Hipot Tester	V108	10 kV AC/ 15 kV DC/IR /40 A Ground Bond and Hipot Tester
V104	6 kV AC/ 11kV DC/IR /40A Ground Bond and Hipot Tester	V109	40 A Ground Bond

Hipot Lead Sets for All Testers

ITEM	DESCRIPTION	ITEM	DESCRIPTION
TL-UP1	Universal Power Receptacle Hipot Test Adaptor	TL- 115-3	NEMA 5-15 Power Socket- GB only Test Lead Set
TL-UP2	Universal Power Receptacle Hipot & GB Test Adaptor	TL-TP1	HV Retractable Tip Test Pistol Test Lead 6 ft
TL-UP3	Universal Power Receptacle GB only Test Adaptor	TL-209	HV/Continuity Test Lead set
TL-IEC1	IEC 320 C13 Power Socket Hipot Test Lead Set	TL-30	Heavy Duty HV Alligator Test Lead Set 4 ft
TL-IEC2	IEC 320 C13 Power Socket Hipot & GB Test Lead Set	K-1	4-wire Kelvin Low Resistance Measurement Lead Set (10A Max)
TL-IEC3	IEC 320 C13 Power Socket GB only Test Lead Set	K-2R	4-Wire 2 Clip 40A Ground Bond Test Lead Set 4 ft
TL-115-1	NEMA 5-15 Power Socket Hipot Test Lead Set	RM-1	Rack Mount Kit
TL-115-2	NEMA 5-15 Power Socket Hipot & GB Test Lead Set		

964i High Voltage Switching System

ITEM	DESCRIPTION	ITEM	DESCRIPTION
964i	High Voltage Switching System Mainframe (8 card capacity)	LV3-8B	3 kV Single - Input Bus 8 Outputs, Black Banana Jacks
964i-8X2MX	Pre-built 964i w 2 ea 7 kV 8 Ch. Cards and a Hipot/Cont Mux Card	LV3-8S	3 kV (-) Bus Input 4 Outputs Blk, (+) Bus Input 4 Outputs Red
964i-16X2MX	Pre-built 964i w 4 ea 7 kV 8 Ch. Cards and a Hipot/Cont Mux Card	LV3-MX2	3 kV Dual Input (HV/Cont) Single Output (+) Bus
964i-24X2MX	Pre-built 964i w 6 ea 7 kV 8 Ch. Cards and a Hipot/Cont Mux Card	HV7-8W	7 kV Single (+) Input Bus 8 Outputs, White HV Terminals
LV3-8R	3 kV Single (+) Input Bus 8 Outputs, Red Banana Jacks	HV7-8B	7 kV Single (-) Input Bus 8 Outputs, Black HV Terminals

964i High Voltage Switching System (continued)

ITEM	DESCRIPTION	ITEM	DESCRIPTION
HV7-8S	7 kV (-) Bus Input 4 Outputs Blk, (+) Bus Input 4 Outputs White	RM-1	Rack Mount Kit
HV7-MX2	7 kV Dual Input (HV/Cont) Single Output (+) Bus	HVC-M	Additional Male HV Mating Connector
HV10-8W	10 kV Single Input Bus 8 Outputs, White HV Terminals	HV15-8B	15 kV Single Input Bus 8 Outputs, Black HV Terminals
HV10-8B	10 kV Single Input Bus 8 Outputs, Black HV Terminals	HVC-FW	Female HV Panel Mount Receptacle/Connector, White
HV10-MX2	10 kV Dual Input (HV/Cont) Single Output (+) Bus	HVC-FB	Female HV Panel Mount Receptacle/Connector, Black
HV15-8W	15 kV Single Input Bus 8 Outputs, White HV Terminals	TL-HVW	20 kV Rated 18 AWG Test Lead 4 ft , HVC-MW to Alligator Clip
GP-964	GPIB Interface Option	TL-HVB	20 kV Rated 18 AWG Test Lead 4 ft , HVC-MB to Alligator Clip
GP-1	GPIB Cable, 1 meter length	HVW-20	Bulk 20 kV Rated 18 AWG Test Lead Wire, price per ft
VICL-2	Replacement Vitrek Hipot Communication Cable 7 ft		

98x Teraohmmeter/IR Testers

ITEM	DESCRIPTION	ITEM	DESCRIPTION
981i	6.5 kV Teraohmmeter/IR Tester	RM-1	Rack Mount Kit
981i+HSS2	6.5 kV Teraohmmeter/IR Tester w/ HSS2 Option	RSS-95	Remote Start/Stop Switch
983i	11 kV DC 6 kV Teraohmmeter/IR Tester	RFS-95	Remote Start Foot Switch
QTI-9	QT Insite Software	TL-980	Standard Test Lead Kit for 9LX

4700 High Voltage Metering

ITEM	DESCRIPTION	ITEM	DESCRIPTION
4700	Precision High Voltage Meter	HVL-70	70 kV Bench Top Lab Probe
BP-47	Internal 11 Hour Battery Pack	HVL-100	100 kV Bench Top Lab Probe
GP-47	GPIB (IEEE-488) Interface	HVL-150	150 kV Bench Top Lab Probe
HC-47	Hard Carrying Case	HVL-35G	35 kV High Impedance Lab Probe
RM-47	Rack Mount Kit	HVL-70G	70 kV High Impedance Lab Probe
HVP-35	35 kV Handheld Probe	HVL-100G	100 kV High Impedance Lab Probe
HVL-35	35 kV Bench Top Lab Probe	TL-47	Replacement Test Lead kit

DL Series DC Electronic Load

ITEM	DESCRIPTION	ITEM	DESCRIPTION
DL115	150V/21A/125W DC Load with 3.6kW/32A transient capacity	DL250	500V/42A/250W DC Load with 4.8kW/65A transient capacity
DL215	150V/42A/250W DC Load with 7.25kW/65A transient capacity	DL550	500V/84A/500W DC Load with 9.6kW/130A transient capacity
DL515	150V/84A/500W DC Load with 14.5kW/130A transient capacity	RM-DL	Rack Mount Option
DL150	500V/21A/500W DC Load with 2.4kW/32A transient capacity		

PA900 Series Power Analyzers

ITEM	DESCRIPTION	ITEM	DESCRIPTION
PA900	Power Analyzer Mainframe – 4 Channel Capacity	H500	Increases Capability up to 500 Harmonics
PA910	High Precision Power Analyzer Mainframe – 4 Channel Capacity	EN	Adds Built-in EN61000 Compliance Computations
PA920	Ultra-High precision Power Analyzer Mainframe – 4 Channel Capacity	LPA-1	Universal Load Power Adaptor
S *	See Vitrek.com for Standard Channel Cards Options	HC-7	Hard Carrying/Shipping Case with Die Cut Foam
A *	See Vitrek.com for Hi-accuracy Card Options	RM-7	4U (7”H) 19” W Rack Mount Kit
W *	See Vitrek.com for Wideband Current Channel Card Options	ISO-CALN-C1	Channel Card ISO 17025 Cal with Data (with purchase)
MT	Motor Transducer Channel Card		

CALIBRATION YOU CAN COUNT ON



Vitrek provides fast, reliable calibration services for all its products from its US-based, ISO 17025:2017 (A2LA accredited) laboratory—the highest quality calibration available. Our technicians perform calibrations every day, giving them unmatched familiarity with Vitrek technology. Each instrument undergoes full performance testing and adjustment to maintain accuracy, with results traceable and compliant with NIST standards.

Regular calibration ensures precise, consistent measurements, prevents drift caused by time, temperature, or humidity, and supports long-term instrument reliability. Flexible calibration and repair options, along with worldwide support, ensure expert service before, during, and after the sale.

New Instrument Calibration & Certification

Calibration is included with all new Vitrek electric testing instruments, confirming the product's compliance and traceability. A copy of the calibration certificate is provided at shipment and kept on file for replacement if needed. The certificate documents proof that measurement hardware meets its published specifications. At a minimum, it will identify the device calibrated, proof of traceability, environmental conditions (temperature and humidity), date of calibration, and confirmation that the device meets a quality standard.

- **ISO 17025 Accredited Calibration with Data & Uncertainties:** For strict quality requirements, Vitrek provides accredited calibration with full data and uncertainty documentation.
- **NIST Calibration Without Data:** A basic, economical option for less demanding certification needs that do not require ISO 17025 certification.

Ongoing External Calibration Services

Why choose a third-party provider when Vitrek performs calibrations on our technology every day?

When your instrument reaches its calibration interval, simply return it to us. We verify performance against external traceable standards, fine-tune results to the center of their limits and ensure your unit leaves operating like new. Our highly skilled factory technicians deliver precise, dependable work with some of the fastest turnaround times in the test-equipment industry. Service includes:

- Evaluation of capabilities against specifications with measurement uncertainty considered
- Adjustments to improve accuracy
- Optional firmware or hardware updates
- Calibration certificate confirming compliance

Schedule your recalibration today.

Request directly at vitrek.com/contact-us-rma-cal/ or call us to learn more



Self-Calibration vs. External Calibration

Self-guided or internal calibration uses onboard reference standards to adjust for drift or environmental changes. While valuable, it does not replace external calibration. External calibration, like that offered by Vitrek, compares your instrument to traceable standards, verifies tolerances, adjusts accuracy, and delivers formal certification. System calibration quantifies and compensates for total measurement error that can occur in your setup. Cable losses and sensor offsets can create inaccuracies. Vitrek can adjust or apply compensation factors across the system's range.

By using our accredited facility, you not only receive calibration but also firmware and hardware updates, ensuring your instrument operates at the latest level of performance and reliability. Internal and external calibration work together to ensure long-term accuracy.

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Academic Discount Program

EDUCATORS AND RESEARCHERS:

Get 15% off Vitrek Testing Instruments

We understand your unique challenges—tight budgets, growing workloads, and the need for reliable, easy-to-use equipment.

Our Academic Discount Program helps qualifying universities, vocational schools, graduate schools, technical colleges, research laboratories and training facilities upgrade by offering reduced pricing on Vitrek's advanced, high-performance, user-friendly test instruments. Our products are ideal for both advanced research and student use, and trusted by academic institutions and research laboratories worldwide.

Call us to learn more.

Some exclusions apply:

- May not be combined with any other discount or offer.
- Excludes institutions that do not provide student education related to these products.
- Calibration & repair are sold separately and not eligible for the discount.
- Other exclusions may apply. Contact Vitrek for details for your specific institution and application.

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