

V4 Hipot Electrical Safety Analyzer

Performance & Economy

The new Vitrek V4 Hipot Electrical Safety Analyzer combines AC & DC Hipot with high current ground bond and insulation resistance testing, all in one feature rich, fully automated, easy to use instrument.

The uncompromising performance of the V4 delivers fast, consistent, reliable results – test after test. And it does it from a single test connection. The V4's crystal clear LCD user interface is remarkably easy to use and has all the information you need to get the job done right.

Features/Benefits

- 5kVAC 40mA, 6kVDC 10mA
- Ground Bond 3 to 40 Amps
- Multi-mode IR 50 to 1000V
- SFI[™] Safety Fault Interrupt
- RS232 Standard, available GPIB
- High Speed Discharge
- 36 Position Memory
- Selectable Arc Detection
- PLC Remote Interface

Specifications

AC Hipot

Voltage Range:	100 to 5000VAC RMS
Voltage Setting Resolution:	5V/step
Voltage Regulation:	1% of reading ± 5V
Voltage Accuracy:	1% of reading ± 10V
Voltage Monitoring:	At Output Terminals
Output Current:	30mA to 40mA 180S max, 10 to 30mA continuous. Below 500V 10mA max
Min/Max Current Limits:	0.1 to 40mA
Current Accuracy:	1% of reading ± 50μA

Top of Page

DC Hipot

Voltage Range:	100 to 6000VDC
Voltage Setting	Resolution: 5V/step
Voltage Regulation:	1% of reading ± 5V
Voltage Accuracy:	1% of reading ± 10V
Voltage Monitoring:	At Output Terminals
Max Output Current:	10mA continuous, below 500VDC 2mA continuous
Min/Max Current Limits:	0.01 to 10mA
Current Accuracy:	1% of reading ± 50μA

Insulation Resistance

DC Output Voltage:	50, 100, 500 or 1000V	
Resistance Range:	1 to 9999mΩ	
Resistance Accuracy: (% of reading)		
50, 100 VDC	1-50MΩ 5% 51-200MΩ 10% 201-1999MΩ 20%	
500, 1000 VDC	1-500MΩ 5% 501-2000MΩ 10% 2001-9999MΩ 20%	
Multi-Mode IR™:	Select 1 of 3 modes - Test passes on good reading, test fails on bad reading, pass/fail determined at end of test time.	

Top of Page

Ground Bond/Continuity

Test Current:	3 to 40 Amps RMS
Terminal Configuration:	4 wire Kelvin
Resistance Range:	0 to 600mΩ
Resistance Resolution:	100μΩ
Resistance Accuracy:	1% reading ± 3mΩ
Compliance Voltage:	8V at terminals
Current Resolution:	0.01A
Voltage Resolution:	0.01V

Top of Page

General

Test Database:	6 test sequences with up to 6 steps per test sequence
Front Panel Lockout:	Prevents database edit while in lockout mode
Arc Detect:	10 level trip select
Remote Interfaces:	Fully interactive RS232 - standard. PLC Interface with Outputs of Testing, Pass, Fail and Inputs of Start, Reset - standard. Talk/Listen GPIB interface - Option GP-V4.
Timer Accuracy:	0.25% ± 50mS
Power Source:	100, 120, 220, 230VAC (±10% 50/60Hz), 350W max
Operating Environment:	Indoor use, altitude up to 6500 ft (2000m). Installation Category II. Pollution Degree 2.
Operating Temperature:	0°C to 40°C, 80% RH
Storage Temperature:	-10°C to 70°C, 70% RH
Dimension:	17.6"L x 13"W x 5.9"H, (446mmL x 330mmW x 149mmH)
Weight:	33lbs (15kg) net, 40 lbs (18 kg) ship
Accessories:	NIST Cal Cert, TL-20-50 & K-Test Leads, Instruction Manual and Power Cord.
Accuracy:	Stated specifications apply for 1 year at 23°C ± 5°C.
Calibration:	ANSI/NCSL Z540 Certificate of Calibration with Data provided, traceable to NIST.
Compliance:	CE Mark Certified to EN61010 and EMC Directives EN50081-1 & EN50082-2.
Warranty:	3 Year Extended Warranty with annual factory calibration. 1 year parts and labor standard.

$QuickTest^{TM}$ Software

Option QT-V4: Interface Cable. Easy to load graphical test sequence development and operating environment. Provides

time/date, operator, test parameters, test results and readings. Results may be viewed, printed out or exported
to a database program.