



V7X Series - Hipot Testers

With color touch LCD & high speed DSP technology, the compact & rugged V7X sets the standard for price/performance ratio. Made in the USA to meet tough UL, CSA, TUV and IEC Hipot requirements - the V7X provides unbeatable speed, accuracy, user safety and reliability.



Electrical Safety Testing will Never be the Same

Choose from six low cost models offering AC & DC Hipot to 5KV, leakage current measurement to 100 nano-amps, Insulation Resistance to 450GΩ and Ground Bond to 30 amps. Combine all that with USB, RS232 and Digital I/O interfaces, plus a 2 year warranty.

The V7X is simply unbeatable

Vitretek V7X Series Performance Specifications

AC Hipot

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|-----------------|---|
| Output Voltage | 10 to 5000V 50 or 60 Hz Accuracy : 1.4% of setting +0.1% Full Scale, No load to full load Resolution : 1V at all levels Max load current : 20mArms |
| Leakage Current | Min/Max Limits during dwell of none, or up to 20mArms Accuracy : 1.5% of reading +5uA Resolution : 1uA |

DC Hipot

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| Output Voltage | 20 to 5000V test voltage Accuracy : 1.4% of setting+0.1% Full Scale, No load to full load Resolution : 1V at all levels Max load current : 10mA |
| Leakage Current | Accuracy : 1.5%+1uA Resolution : 0.1uA |

IR - Insulation Resistance

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|-----------------|---|
| Test Voltage | 20 to 5000VDC Accuracy : 5%+5V No load to full load Resolution : 1V at all levels Max Charge Current: 5mA automatic Max Capacitive Load: 2uF |
| Resistance | Max IR: 450Gigohm (90MΩ per volt) Min IR: 150KΩ Accuracy : 2% (rdg <5% of max IR), 5% (< 15% of max IR), 10% (< 30% of max IR), 20% (above 30% of max IR) Max Resolution : 0.1% of value Min/Max Limits : Defined for each step, max may be set to none |
| Test Completion | Stop on Time: Determination on final reading Stop on Pass: Test terminates with PASS for any reading within limits Stop on Fail: Test terminates with FAIL for any reading outside limits Stop on Steady: Test terminates with PASS for any reading within limits which is |

Low Resistance

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| Resistance | Range: 0ohm to 60Kohm Accuracy : 1.4 %+0.02Ω (<10Ω), 3%+1ohm (<1KΩ), 10 % above 1KΩ Resolution : Down to 0.001Ω Min/Max Limits : Defined for each step, each may be set to none |
| Test Method | 2 terminal measurement , 10.5mA max, 4.15V max |
| Resistance Offset | Test leads/fixtures measurement offset may be universally applied |

Ground Bond

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| Test Current | 1 to 30Arms (42A pk), 50/60Hz Accuracy : 2.5%+10mA Resolution : settable to 0.01A at all levels Compliance: > 4.5Vrms (6V pk) for all currents |
| Method | 4 terminal measurement |
| Resistance | Max Resistance: Up to compliance V limit at defined test current (4.5ohms max) Min/Max Limits : Defined for each step, min may be set to none Accuracy : 2.5%+3mΩ (<2A), 2mΩ (<6.5A), 1mΩ (otherwise) Resolution : 0.1mΩ (>6.5A), 1mΩ (otherwise) |
| Resistance | Offset Test leads/fixtures measurement offset may be universally applied |

Test Timing

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| Ramp Time | For AC/DC Hipot: 0 to 99.9sec (0.1sec resolution, 0.05sec accuracy) |
| Test/Dwell Time | 0.1 to 9999sec or user end (0.1sec resolution, 0.15sec accuracy) |
| Ramp Down | May be set to 0sec or same as Ramp time, automatically skipped if no failure and next step is same AC/DC or IR test type |
| Shutdown | Breakdown : within 150us HV Safety : within 1ms User Stop or Interlock opened : within 2ms Resistance/Current Limit : within 100ms |

General Specifications

DSP Measurement 40,000 samples per second for output control and parameter measurement

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|-------------------|---|
| Display | 4.3" 480 x 272 Color touch LCD user interface |
| Interfaces | USB 2.0, RS232 & Contact closure digital I/O with safety interlock |
| Warranty | 2 year parts and labor |
| Accessories | Alligator test leads for hipot & continuity units (TL-209), 4-wire alligator test leads for GB units (K-2R), operator's manual CD, QT Pro V utility software and evaluation version test automation software & power cord |
| Calibration | 2 year accuracy specifications and recommended calibration interval, ANSI/NCSL Z540 NIST Traceable cal cert with data standard |
| Safety | CE mark certified to EN61010 |
| Power | 115/230VAC \pm 10% internally selectable, 50-60Hz, 200VA max |
| Dimensions | 5.25" (133mm) H x 9.5" (240mm) W x 11" (280mm) D |
| Weight | 12 lbs, 5.5kg net (V70-73), 16 lbs, 7.3kg net (V74 & V79) |
| Country of Origin | Made in the USA |