Test to A620B Guidelines!

CableEye® HVX System for High Voltage Cable Testing

Fast, Accurate, Superb Graphics and Documentation

CableEye HVX High Voltage Test System, 128 Test Points

Item 829, 1500 Vdc, 1000 Vac

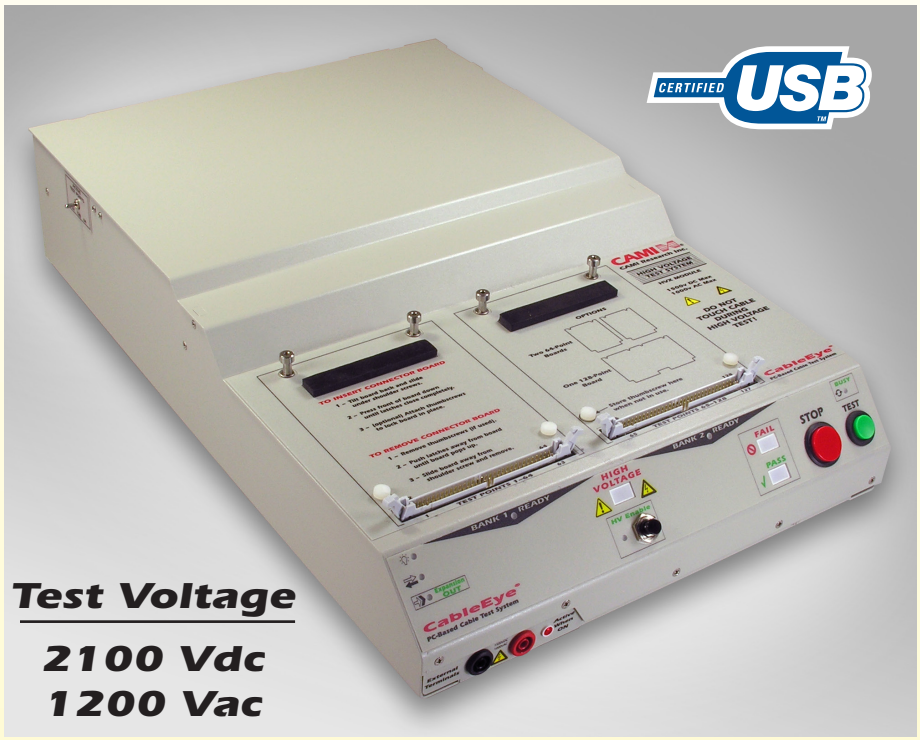
Item 829A, 2100 Vdc, 1200 Vac

Options:

Item 828, 128-point Expansion Module (attaches to base of Item 829)

Item 832, 4-Wire Kelvin Resistance Measurement, 1 mΩ at 1 A

Item 829X, Remote Control Connector for Deadman Switch



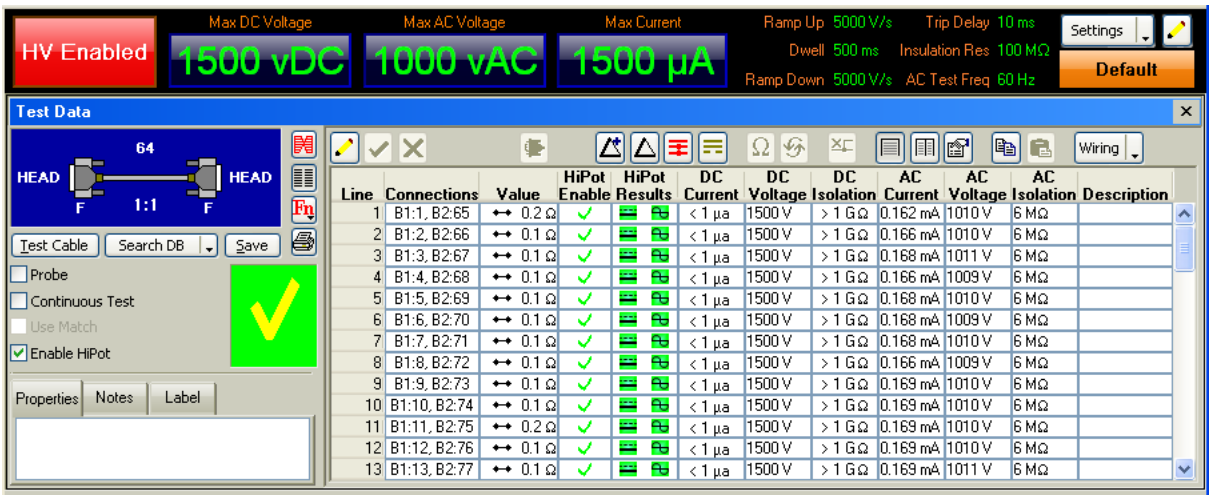
*CableEye® **Model HVX**, 128 Test Points, Expandable*

Includes a 128-point fixture, electronics, and software, expandable to 512 test points by connecting HVX Expansion Modules (Item 828). A low-voltage subsystem performs basic continuity and resistance checks. Set resistance thresholds for contact resistance down to 0.1 Ω, and for isolation up to 5 MΩ. Measure embedded resistors from 100 Ω to 1 MΩ with 1% accuracy, and lesser accuracy from 0.1 Ω to 5 MΩ. Four-wire Kelvin measurement option available for resistance measurement to 1 mΩ at up to 1 A test current. Measure diodes and diode forward voltage. The high voltage test phase permits expanded testing for insulation resistance and dielectric breakdown. After checking for opens, shorts, miswires, and resistance limits, the HVX system will apply a user-selectable voltage from 10 V to 1500 Vdc (2100 Vdc), or 10 V to 1000 Vac_{rms} (1200 Vac_{rms}) to each connection group in the cable. Ramp rates and dwell time are adjustable. Current leakage detected during the high voltage test phase provides a measure of insulation resistance up to 1 GΩ (5 GΩ for 2100 V unit), and any leakage current exceeding a preset limit reveals the presence of moisture, flux, or other contamination on exposed contacts.

CableEye's high voltage test capability allows users to meet the industry-standard A620B guidelines for cable and wire harness testing. The system also produces archival-quality reports for each cable tested showing the test voltage, leakage current, and insulation resistance for each wire group, and clearly denotes PASS or FAIL at the top of the report. The additional External Terminals, not found on competitive multi-point cable testers, permit basic insulation testing on chassis and individual components.

External Terminals for Component Testing

A TEST pushbutton with READY, PASS, and FAIL indicators permits one-button operation. Software includes scripting capability for fully-automatic production testing. Guided assembly and other software options available. Low-voltage cable measurement time less than 0.5 s. Industry-standard 64-pin dual-row latch headers easily interface to external test fixtures of your own design for custom applications. Also includes a remote control socket for an external footswitch (Item 714) or for a custom remote control to extend panel indicators, and a 10-pin probe socket. Rugged, 1/16"-thick aluminum case with scratch-proof Lexan surface for long life in an industrial environment. The price includes a CB29 board set (Item 759, Screw Terminals) or your choice of another board set of equivalent value, PC software, User's Guide, one-year warranty, one-year free tech support, one-year free software and database upgrades. *Ready to use.*

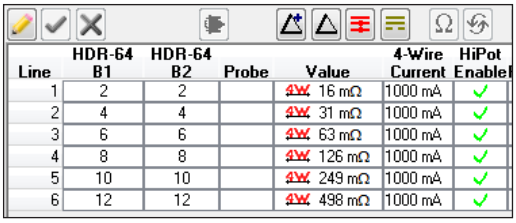


Line	Connections	Value	HiPot Enable	HiPot Results	DC Current	DC Voltage	DC Isolation	AC Current	AC Voltage	AC Isolation	Description
1	B1:1, B2:65	0.2 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.162 mA	1010 V	6 MΩ	
2	B1:2, B2:66	0.1 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.166 mA	1010 V	6 MΩ	
3	B1:3, B2:67	0.1 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.168 mA	1011 V	6 MΩ	
4	B1:4, B2:68	0.1 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.166 mA	1009 V	6 MΩ	
5	B1:5, B2:69	0.1 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.168 mA	1010 V	6 MΩ	
6	B1:6, B2:70	0.1 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.168 mA	1009 V	6 MΩ	
7	B1:7, B2:71	0.1 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.168 mA	1010 V	6 MΩ	
8	B1:8, B2:72	0.1 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.166 mA	1009 V	6 MΩ	
9	B1:9, B2:73	0.1 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.169 mA	1010 V	6 MΩ	
10	B1:10, B2:74	0.1 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.169 mA	1010 V	6 MΩ	
11	B1:11, B2:75	0.2 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.169 mA	1010 V	6 MΩ	
12	B1:12, B2:76	0.1 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.169 mA	1010 V	6 MΩ	
13	B1:13, B2:77	0.1 Ω	✓		< 1 µa	1500 V	> 1 GΩ	0.169 mA	1011 V	6 MΩ	

Test Result Screen

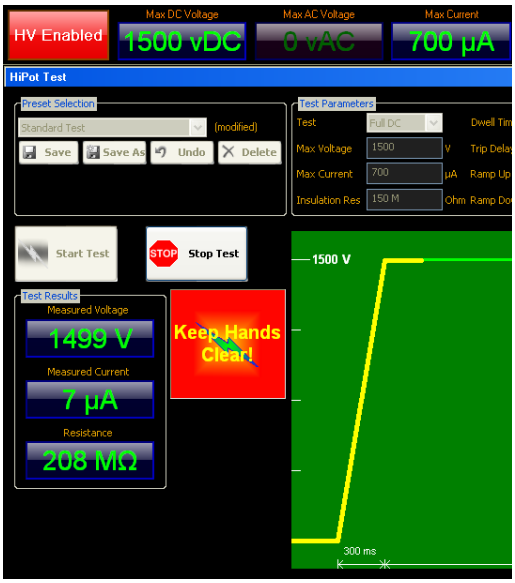
HVX TECHNICAL SPECIFICATIONS

	Low Voltage	High Voltage
Test Points Available	64, 128, 152 Switch Selectable	64, 128 Switch Selectable
Expandable	Yes, to 512 Max	
Test Time	0.2 s One Threshold 0.25 s Two Thresholds	Depends on voltage, ramp rate, and test algorithm selected
USB Interface	USB 1.1, Fast, Two Ports Required	
Resistance Thresholds	0.1 Ω Conduction to 5 GΩ Isolation	
Resistance Measurement	1% from 100 Ω to 1 MΩ Lesser accuracy over full range.	5% 1 MΩ to 100 MΩ, Lesser accuracy above 100 MΩ
4-Wire Kelvin	Sensitivity: 1 mΩ ±1 mΩ, Range: 1 mΩ to 5 Ω Test Current Programmable 100 mA to 1 A	
Diode Meas.	Orientation and Forward Voltage, Rev. Breakdown	
Test Voltage	10 V	10 - 1500 Vdc (2100 Vdc) 10 - 1000 Vac (1200 Vac) in Increments of 1 V
Test Voltage Accuracy		DC: ± 2%, ± 1.5 V AC: ± 4%, ± 2 Vrms
Maximum Test Current	3.3 mA 2-Wire 100 mA to 1 A 4-Wire	HV: Trip Current Adj, 25 µA – 1.5 mA
Dielectric Withstand Range		DC: 25 µA – 1.5 mA AC: 50 µA – 1.5 mA
Dielectric Withstand Accuracy		DC: ± 5%, ± 5 µA AC: ± 5%, ± 100 µA
Dwell Time Range	1 µs to 100 ms	10 ms - 300 s
IR Measurement Range	10 MΩ Max at 10 V	2 MΩ - 1 GΩ at 1500 Vdc 2 MΩ - 5 GΩ at 2100 Vdc High depends on adapter leakage
Calibration	Recommended Yearly	Recommended Yearly
I/O Connectors	64-pin dual-row headers, Two per 128-point module.	
Remote Control	mDIN8 Connector for Footswitch or External control. Option: Front-Panel Remote Socket for Deadman Sw.	
Power Req.	100 - 250 Vac, 130 W (max), IEC-standard C14 plug.	
Computer Req.	Win XP-SP3, Win7, Win8, Win10. Compatible with laptops.	



Line	HDR-64 B1	HDR-64 B2	Probe	Value	4-Wire Current	HiPot Enable
1	2	2		16 mΩ	1000 mA	✓
2	4	4		31 mΩ	1000 mA	✓
3	6	6		63 mΩ	1000 mA	✓
4	8	8		126 mΩ	1000 mA	✓
5	10	10		249 mΩ	1000 mA	✓
6	12	12		498 mΩ	1000 mA	✓

4-Wire Test Result Screen



External Terminals Control Screen

CE Compliance-Tested for Safety and Electromagnetic Compatibility

www.camiresearch.com

CAMI Research Inc.
42 Nagog Park, Acton, Massachusetts 01720
Tel: +1 978 266-2655 Fax: +1 978 266-2658