

1500 High Voltage Series



Low cost, benchtop harness tester puts 1500VDC/1067VAC control at the tip of your finger!

The Horizon's portability, simplicity and reliability have earned it international recognition throughout the automotive, aerospace, computing, medical, military, telecom and transportation sectors. Horizon wiring analyzers test everything from simple data cables to complex wiring harnesses.

Typical applications range from functionality testing of SCSI terminators and computer network switch-hubs to the field analysis of wiring assemblies in military aircraft.

The Horizon offers an unrivalled diversity of test scenarios in a portable wiring analyzer. Its touch-screen control makes it exceptionally easy to program and test. Standard test capability includes **fault location** and **automatic product learning**.

All models enable 128-point testing with modular expansion capability up to 1024 points plus high current and HiPot testing capability up to 1500 VDC and/or 1067 VAC.

Horizon software enables error-free product assembly with its **Build-Aid** tool, powerful program development using TCL scripting and virtually unlimited test storage capabilities with a built-in hard disk.

All Horizon wiring analyzers support **SPC**, which enables users to manipulate test data in leading spreadsheet and database applications.

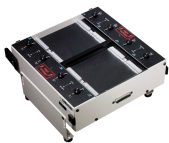




Horizon HV1



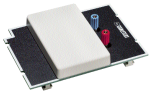
Digital Probe



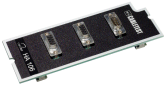
Expansion Box



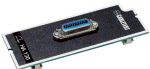
Palm Switches



Verification Tool



HA106 Adapter



HA130 Adapter



HA207A Adapter

**[Models]**

Horizon multi-point cable and harness test systems are supplied with a minimum of 128 high-voltage test points and can be configured with the following sources:

Model	VAC	VDC	HC
HV1	-	1000	1A Fixed
HV2	-	1500	1A Fixed
HV3	1067	-	1A Fixed
HV4	1067	1500	1A Fixed
HV5	1067	1000	1A Fixed
HV6	-	-	1A Fixed

**[System Configuration]**

- The built-in Pentium PC and hard drive provides fast and capable computing power allowing fully independent operation of each Horizon tester
- The following external computing capabilities can be easily added: VGA monitor, printer, keyboard, mouse, network capability and I/O for PLC control
- Supplied with ground probe, instruction manual, AC power pack, calibration certificate and one-year warranty

**[Options and Accessories]**

- Full range of product adapters
- Custom adapter kits
- Expansion boxes in 128-point increments with cable lengths of 3', 6', 9' and 15'
- Tools for periodic verification of system calibration
- Palm switches for initiating tests
- 1A/28VDC programmable high-current source
- Ethernet interface card
- Handheld digital probe for remote probing of product under test
- TCL scripting language
- Simplex and Kelvin test adapters

**[SPC and Data Management]**

- Text format of test programs and log files permit export, edit and SPC capabilities
- TCL script language for advanced applications (requires TCL scripting option)

**[Test Capabilities]**

- High Voltage Breakdown (HiPot)
- Insulation Resistance
- Flex test for intermittent failures
- Twisted pair verification
- Resistors, capacitors, diodes, relays, LEDs and switches

**[Specifications]**

**Measurement Speed**

- Test a 500 point net in under 1 second
- Auto-start test when product is loaded
- Self-learn known good products

**Resistance Ranges and Accuracy**

- Two-wire:
  - 0mΩ to 2MΩ at ± 2.5% or ± 20mΩ
  - 2MΩ to 10MΩ at ± 7.0%
  - 10MΩ to 25MΩ at ± 15%
  - 20MΩ to 50MΩ at ± 30%
- Four-wire:
  - 0mΩ to 400Ω at ± 2.5% or ± 10mΩ
  - 400Ω to 2MΩ at ± 2.5% or ± 20mΩ
  - 2MΩ to 10MΩ at ± 7.0%
  - 10MΩ to 25MΩ at ± 15%
  - 25MΩ to 50MΩ at ± 30%

**Capacitance Ranges and Accuracy**

- 50pF to 1mF at ± 4%
- 50pF to 10,000mF at ± 10%

**High Voltage AC**

- Output Voltage: 50V to 1067V at 1V resolution
- Frequency: 50Hz/60Hz
- Leakage Current: 5μA to 5mA at 5μA resolution
- Capacitance neutralization
- Arc detection
- Maximum IR: 200 MΩ
- Accuracy: ± 12%

**High Voltage DC**

- Output Voltage: 50V to 1500V at 1V resolution
- Leakage Current: 1μA to 5mA at 1μA resolution
- Arc detection
- Maximum IR: 1.5 GΩ
- Accuracy: ± 4%

**Programmable High Current Source**

- Output Current: 1mA to 1A at 1mA resolution
- Output Voltage: 2V to 28V at 0.1V resolution
- Accuracy: ± 2.5%

**Fixed High Current Source**

- 4-wire Resistance: 1mΩ to 4Ω at 0.1mΩ resolution
- Accuracy: ± 1.5%, + 1mΩ

**[Physical Data]**

- Power: 110/220VAC, 50/60 Hz, 1A
- Dimensions: 17" L x 9" W x 5" H
- Weight: < 20 pounds (128 point unit)

1. Certain features in this datasheet are optional  
 2. CableTest Systems reserves the right to update specifications at any time (see [www.CableTest.com](http://www.CableTest.com) for the latest updates)

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