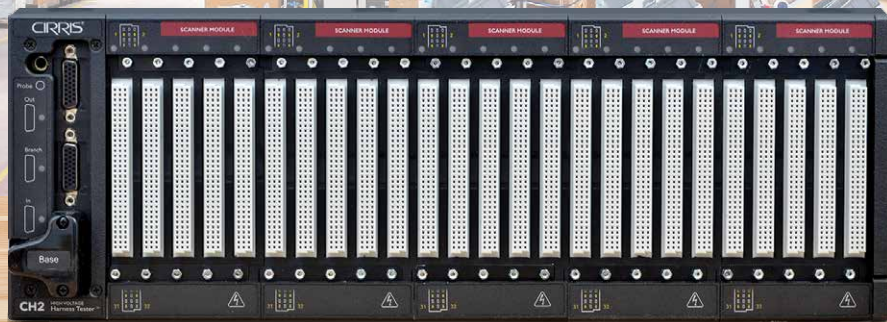




CH2 High Voltage Harness Tester



test
points



pc
control



high
voltage

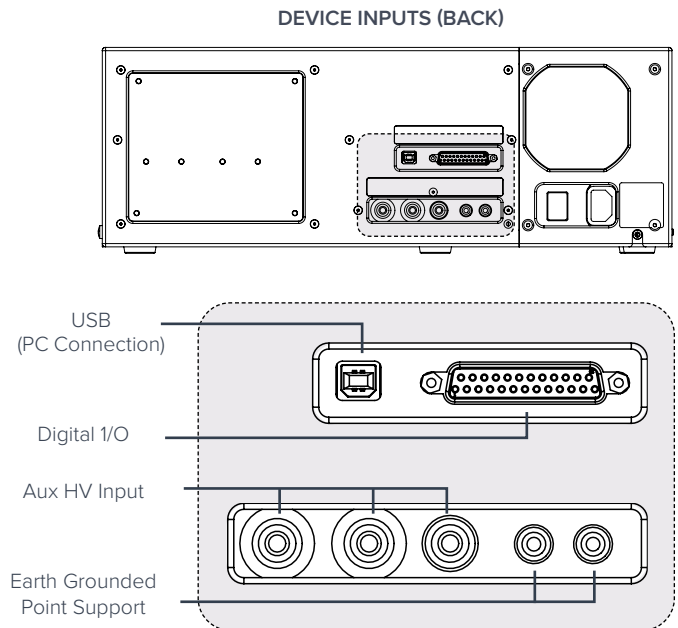
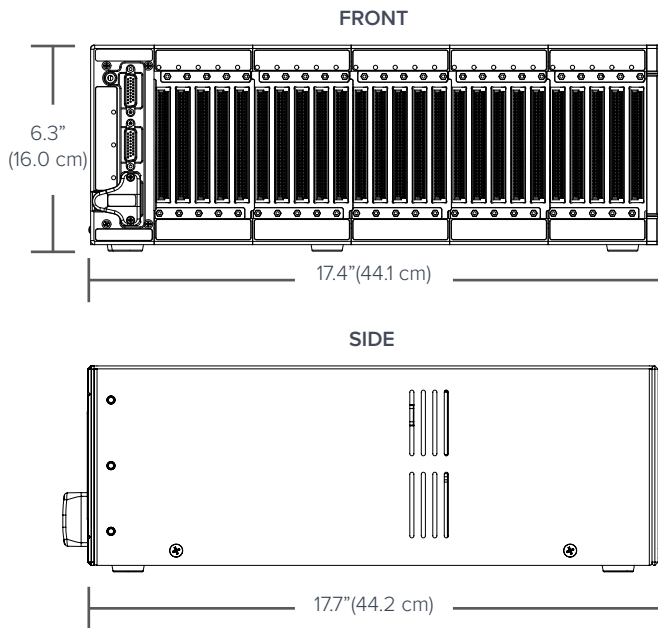


guided
assembly

As test standards become more stringent, particularly in the realm of high voltage testing, you are tasked with ensuring the functionality and quality of increasingly complex assemblies. The CH2 is a versatile harness tester that offers the highest levels of test control. Its compact and capable design sets it apart from the competition in the marketplace. This capable tester can integrate with auxiliary test equipment, or with the Cirris Energization box for testing active components such as relays and sensors.

Product Features

- **Capable Hipot Testing** – Up to 1500 VDC and 1070 VAC.
- **Expandable for Large Assemblies** – Up to 100,000 points in 160-point increments.
- **Compact** – High test point density in an industry leading light and small package.
- **Low Voltage Test** – Automatic fast low voltage pretest finds errors before high voltage testing.
- **Passive Components** – Test resistors, capacitors, diodes, and switches.
- **Active Components** – Integrates with the Cirris CH2 Energization Box to test relays, sensors, and other active components.
- **4-Wire Kelvin** – Supports highly accurate 4-wire Kelvin resistance measurements.
- **Advanced Measurements** – Supports sensitive measurements with advanced measurement controls and the integration of external precision meters.
- **Operator Friendly** – On-screen connector images, cable interface LEDs, and audible prompts guide operators and alert them of errors.
- **Flexible Test Setup** – Supports both traditional cable interface and modular Cirris Smart-Lights® cable interface for quick test setup.
- **Effective Reporting** – Test reports can be readily customized for organization and understanding.
- **Test Records** – Access and print previous test results from a test archive.
- **Secure** – Restrict software access based on operator logins.
- **Digital I/O Option** – Integrate fixture clamps, sensors, and more with built-in I/O.
- **Network Capable** – Share test programs, test records, and fixture information throughout your plant. Print to network printers.
- **PC Based** – Provides Easy-Wire software control. Supports barcode scanners and Windows local and network printers as needed.
- **Test Standards** – Meets the requirements of the following test standards: IPC/WHMA-A-620, MIL-STD-202G, MIL-HDBK-83575, MIL-STD-1344A(5), and MIL-C-45224D.



CH2 Specifications

Test Points

160 to 800 points; expandable to 100,000 points in 160-point increments. (Max distance from base unit: 200 ft.)

Low Voltage Test

■ 2 Wire

Voltage: Standard 2.5 V max, Optional 100 mV to 10 V

Current: 1 μ A, 10 μ A, 100 μ A, 1 mA, 10 mA $\pm$ 2%

Resistance: 0.1 Ω to 1M Ω $\pm$ 2% $\pm$ 0.1 Ω

■ 4 Wire

Voltage: Standard 2.5 V max

Current: 2 μ A, 20 μ A, 200 μ A, 2 mA, 20 mA, 200 mA, 2 A $\pm$ 2%

Resistance: 0.001 Ω to 100 Ω $\pm$ 2% $\pm$ 0.001 Ω

Components Test

Diodes: 0 to 2.5 V

Resistors: 0.1 Ω to 1M Ω $\pm$ 2%

Capacitors: 10 pF to 5000 μ F $\pm$ 10% $\pm$ 50 pF

Twisted Pairs: Verify proper pairing in twisted pair cables

High Voltage Test

■ Insulation Resistance Test

Voltage: 100 to 1500 VDC $\pm$ 5%, 10 to 100 VDC $\pm$ 5V

Resistance: 5 M Ω to 1000 M Ω $\pm$ 10%, Optional 50 G Ω with external meter

■ Dielectric Withstand Test

DC Voltage: 100 to 1500 VDC $\pm$ 5%, 10 to 100 V $\pm$ 5 V

AC Voltage: 100 to 1070 VAC $\pm$ 5%, 10 to 100 V $\pm$ 5 V

Dwell: 10ms to 120s; 2 to 7,200 cycles

Current Limit: (DC) 10 μ A to 2.5 mA, (AC) 10 μ A to 2.5 mA (RMS)

Max Capacitance / Net: 30 nF @ 1500 VDC, 9.5 nF @ 1000 VAC

HV Energy Limit: 35 mJ

HV Charge Limit: 45 μ C

Max Points Per Net

Unlimited

Digital Input/Output

10 Inputs / 10 Outputs, 30 V Open collector, +12 V and +5 V each current limited to 140 mA

Test Point Interface

96 pos. Female VME Eurocard connector-32 pos. loaded

User Interface

■ PC Requirements

Test Station: 2.0 GHz min. processor speed, Windows 10 Pro® or Windows 10 Pro®, 15 GB hard drive space, 4 GB RAM, 256 MB min. video memory, 1024 x 768 min display resolution, sound (for audible feedback), USB 2.0 or 3.0 port

Optional Network Database Server: As above except no sound or USB ports required. Windows 10 Pro®, Windows 11 Pro®, Windows Server 2012®, Windows Server 2016®, Windows Server 2019®.

Power

115 / 230 V 50/60 Hz

Size

17.4" x 6.3" x 17.4" (44.1 cm x 16.0 cm x 44.2 cm)
(base or expansion unit)

Weight

42 lbs (19kg) (fully loaded unit)

Expansion Options

Energization Unit: Powers relays, lamps, etc. for advanced testing

Isolated Power: Allows testing of devices connected to earth ground