Signature® CH+

Ready to Hipot

ISO 9001
CIRRIS' QUALITY SYSTEM IS CERTIFIED

1500VDC-1000VAC Hipot
Cable/Harness Testing Made Easy™

The Cirris CH+ is a complete cable, harness, and wiring test system capable of testing assemblies up to 5,376 points at voltages to 1500 VDC and 1000 VAC.

Compact Size: The CH+ is an ideal bench-top tester. It is comprised of a base unit and one or more 256-point test-point boxes. Compact in size, the base unit and each test-point box measures only 3.5"h x 10"d x 18"w (9cm x 26cm x 48cm) and weighs approximately 15 pounds (6.8 kg).

Flexible, Easy To Use: The CH+ uses our Windows®-based *easy-wire™* software. This software also runs our popular low-voltage *easy-wire* CR

tester so you can now have low-voltage and high-voltage testers running the exact same software. The CH+ is programmed by self-learning from a sample assembly, importing a wirelist file, or creating and editing your own test program. The CH+ is so easy to set up and use there is no need for costly set-up fees or extensive in-house training.

Fast: The CH+ utilizes solid-state switching for fast, low-voltage continuity testing, and our high-speed hipot algorithm for fast high-voltage testing. It quickly learns and tests, increasing productivity and providing rapid feedback on errors.

Durable, Reliable: Cirris has more than 18,000 cable/harness testers in service in more than 6,000 customer locations throughout the world; most of them in demanding, high-volume applications. This experience and knowledge assure you the CH+ will meet your demanding expectations year after year.

Modular Design, Overnight Service: Cirris testers are built with a unique modular design for easy serviceability. This, along with our overnight board-swap program, means an end to costly downtime.

CIRRIS®
Cable/Harness Testing Made Easy™

Powerful Software: Our Windows®-based *easy-wire*™ software gives you many capabilities in an easy-to-use environment. Some of these features are:

I/O Control: (Optional) Allows you to control PLC inputs and outputs to drive external hardware such as marking/ stamping machines, fixture locks, pushback modules, energizing relays, etc. You can also use Windows® Messages to communicate with other software applications.

SPC Data Collection/Custom Reporting: *easy-wire* software provides full SPC data collection. Along with pass/fail results you can save actual measured values for each assembly tested. You can collect test results by operator, by test station or by product. Custom reporting allows you to completely customize any of the four standard test reports, allowing you to generate a report in exactly the format you want.

Graphical Connectors/Test-Point Labeling: You define a connector type and the number of pins and a graphical representation is instantly generated.

You assign the connector name and point labels in your own terminology.

Security: Set up password-protected security levels for each operator to limit access to system features as desired.

Test Resistors, Capacitors, Diodes, Twisted Pairs: In addition to simple wires, the CH+ can test assemblies with resistors, capacitors, diodes, and twisted pairs. In many cases it will automatically learn the components for you, saving valuable programming time. Individual wires can have separate thresholds allowing you to check for proper wire length, gauge, etc.

4-Wire Resistance Tests: 4-wire Kelvin testing allows you to test resistance as low as .001Ω with 1A of current. It also nulls out fixture resistance giving you a true measurement of the assembly under test. (Requires two test points per point to be tested.)

On-Line Help: The CH+ has an on-line help system that offers complete step-by-step instructions. The operator can get instant help by clicking on any part of the

user interface or by calling up any topic alphabetically.

Easy Calibration: For supporting your ISO 9000 certification requirements, Cirris offers a Performance Check Kit. This kit provides you with the ability to do in-house calibration to the same specifications as the manufacturer.

1536-point CH+ system mounted in 19" relay rack.

Specifications

TEST POINTS
Expandable from 256 to 5,376 points in 256-point increments

TEST LEVELS
Continuity Test
Voltage:	<8 volts <4 mA
Resistance:	2-wire: 0.1Ω to 100kΩ ±2% ±0.1Ω
	4-wire: 0.001Ω to 1.0kΩ ±3% ±0.01Ω
Capacitance:	1nF to 500μF ±10% ±50pF

Insulation Test
Voltage:	100 to 1500 VDC (10-volt steps) ±5% ±5V
Resistance:	5M to 1000MΩ ±10%

Dielectric Withstand Test
Voltage:	100 to 1500 VDC or 100 to 1000 VAC (10-volt steps) ±5% ±5V
Current limit:	(DC) .1mA to 1.5mA, (AC) .1mA to 1.5mA (peak) ±10% ±10μA
Dwell:	(DC) 10ms to 120 sec.
	(AC) 17ms to 120 sec. (1 cycle to 7200 cycles)

MAX CAPACITANCE PER NET
15nF @ 1500VDC, 2.5nF @ l000VAC

HV ENERGY LIMIT
30 mJoules

TEST POINT CONNECTOR
96 pos. FEMALE VME Eurocard connector-32 pos. loaded

COMPUTER REQUIREMENTS
Minimum: Pentium II, 266MHz, Windows 95 or 98 (128 Meg), Windows ME, NT4, or 2000SR1 (256 Meg), color VGA monitor, 1 Gig of hard drive space, one serial port (two if using external I/O), CD-Rom drive, sound card
Recommended: Pentium III, 600 MHz, Windows 95 or 98 (256 Meg) or Windows ME, NT4, or 2000SR1 (256 Meg), color VGA monitor, 2 Gig of hard drive space, one serial port (two if using external I/O), CD-Rom drive, sound card

POWER
105-135 VAC, 60 Hz 16 Watts (210-260 VAC 50 Hz optional)

SIZE
(each box) 3.5" x 10" x 18" (9cm x 26cm x 48cm)

WEIGHT
(each box) 15 lbs. (6.8 kg)

WARRANTY
1 year parts and labor
Replacement modules available next working day