

*Instruments for*  
**ELECTRICAL SAFETY  
COMPLIANCE TESTING**



**HIPOT TESTERS**

**INSULATION RESISTANCE TESTERS**

**FUNCTIONAL RUN TESTERS**

**CUSTOM INSTRUMENTS**

**LINE LEAKAGE TESTERS**

**HV/HC SCANNING MATRICES**

**SOFTWARE SOLUTIONS**

**MEDICAL TEST SYSTEMS**

**GROUND BOND TESTERS**

IEC TÜV c UL us CE

  
**ASSOCIATED  
RESEARCH, INC.®**

## From our humble beginnings



Associated Research, Inc started as a repair company servicing panel meters and instruments back in 1936. Founder James Inman soon made Associated Research a manufacturer when he designed the Vibrotest. Vibrotest, the first battery operated Insulation Resistance Tester ever created, became standard issue on all U.S. Navy ships during World War II. This was the beginning of what would become many industry breakthroughs for Associated Research. As the number of electrical products increased during the post-war economic boom, Mr. Inman realized the need for rugged quality test instruments. AR was again on the leading edge this time with the introduction of the Hypot® high potential tester for electrical safety testing. Hipot testing soon became our forte. True to the beliefs that our founder, James F. Inman, instituted back in 1936, we continue to offer the highest quality instruments on the market.

## To our commitment to innovation

AR has continued to innovate and develop advanced products in the electrical safety compliance testing industry from basic entry-level Hipot and Ground Bond testers to automated multi-function electrical safety compliance analyzers. Our instruments are designed to test to the requirements set forth by safety agencies such as UL, TUV, CSA, IEC, VDE, BSI and European norms. We offer a variety of testers capable of performing AC Hipot, DC Hipot, Insulation Resistance, Ground Bond, Ground Continuity, Line Leakage and Functional Run Testing. We also provide Medical Safety Test systems, modular scanning matrices, AC power sources and a variety of accessories to help meet our customers' testing needs and requirements. We have incorporated easy-to-use graphic LCD's on our products and developed a host of automated interface options to make testing easier to perform.



## We provide unmatched value

Our experience and leadership have helped to shape the industry and our dedication to product development continues to improve the safety testing process for manufacturers around the globe. Our commitment is to provide the highest quality, most advanced instrumentation on the market. In fact, we hold more technology patents on electrical safety testing than any other company. Our instruments all carry the CE Mark and all of our standard testers carry both the coveted TUV-GS and UL safety agency listing marks. This demonstrates our commitment to provide you with the safest and most innovative testers on the market – a commitment our competitors simply cannot make.



## Satisfaction Guaranteed

As the industry leader we also guarantee our customers' satisfaction. If for any reason you are not completely satisfied with your purchase within 45 days, you can receive a full refund, exchange or credit towards another AR product, no questions asked. The high quality of our instruments allows us to provide an industry leading warranty. We offer a standard one year warranty on all of our instruments with the opportunity to extend that warranty for a full five years if the instrument is returned to our factory service center each year for its annual certification and safety inspection. We even offer a three year warranty for those who are unable to take advantage of the factory certification that is part of our extended warranty program.

Once your testing needs are determined, AR is dedicated to making sure that your testing solution provides you with complete satisfaction for years to come. This is why we offer the most comprehensive service program in the industry. Our service program ensures that you receive the value you deserve when using an AR tester.

To satisfy annual calibration requirements we offer expedient work by expert technicians who work exclusively with AR instruments. We guarantee 24-hour turn-around on all of our instrument calibrations. Not many companies can guarantee such turn-around with our high level of service. In the event that service work is required on your instrument we guarantee a 48-hour turn-around. If we do not ship your instrument in time, we'll pay the shipping cost. This is not just a statement, but our guarantee to you. In addition, all calibration and service work is backed by a 90 day service warranty.

Our industry-leading instruments and unmatched customer service distance us from our competitors. AR continues to set a high standard in the electrical safety compliance industry because that's what our customers have come to expect from the industry leader.

## Educational Resources

We understand that finding the right electrical safety testing solution can be a difficult task. That is why we offer our customers a comprehensive selection of educational resources from regional seminars and online webinars to on-site factory sponsored training programs. We also offer an extensive library of technical booklets, articles and white papers. Our focus is to ensure that your investment is maximized and your tester performs safely and reliably.

**At Associated Research, Electrical Safety Compliance Testing is Our ONLY Focus!**



## OMNIA® CE

Multi-function safety compliance analyzers with an enhanced graphic LCD provide complete test setup and results in an easy-to-use interface. OMNIA® provides 4-in-1, 5-in-1 and 6-in-1 testing solutions. Models include AC Hipot, DC Hipot, Ground Bond/Continuity, Insulation Resistance, Functional Run and Line Leakage tests. An optional internal scanner is available for the 8104, 4-in-1 model. An additional external modular scanner is available for use with all models. All models come standard with RS-232. ETHERNET, GPIB and Data Storage Interfaces are also available.

- 8104** - OMNIA 4, 5kV @ 40mA AC, 5kV @ 20mA DC, IR Test, 40 Amp Ground Bond & Optional HV & HC Scanner
- 8105** - OMNIA 5, 5kV @ 40mA AC, 5kV @ 20mA DC, IR Test, 40 Amp Ground Bond & Functional Run Test.
- 8106** - OMNIA 6, 5kV @ 40mA AC, 5kV @ 20mA DC, IR Test, 40 Amp Ground Bond, Functional Run Test & Line Leakage Test.

### Advanced Features Include:

- Autaware® Software Compatible
- Ethernet, RS-232, or GPIB Automation Interfaces
- Data Storage Interface
- Patented SmartGFI®
- Patented Prompt & Hold Function
- Patented CAL-ALERT®
- Patented VERI-CHEK®
- Patented Charge-LO/Ramp-HI
- Scanner Interface
- 50 Memories with 30 steps per Memory
- Built-in Real Current Measurement
- Rack Mountable
- Digital Arc Detection
- Electronic Ramp & Dwell Timers



Safety agency listed.

U.S. Patents: 6,744,259, 6,549,385, 6,515,484, 6,054,865, 6,011,398, 5,936,419, 5,828,222 & 5,548,501.  
Other patents pending.



## HYPOTMAX® CE

HypotMAX® is designed for automated applications requiring testers with either higher voltage or higher output current capability. The HypotMAX® family includes two high current models: the 7700 3-in-1 version with 500VA AC output and the 7704 4-in-1 version with 500VA AC output. The high voltage models are the 7705 10kV AC Hipot, 7710 12kV DC Hipot, 7715 20kV AC Hipot and the 7720 20kV DC Hipot. All models come standard with RS-232. GPIB (IEEE-488) and other automation interfaces optional.

- 7700** - 5kV @ 100mA AC (500VA), 6kV @ 10mA DC & IR Test
- 7704** - 5kV @ 100mA AC (500VA), 6kV @ 10mA DC, IR, 30Amp GB
- 7705** - 10kV @ 20mA AC
- 7710** - 12kV @ 10mA DC
- 7715** - 20kV @ 10mA AC
- 7720** - 20kV @ 5mA DC

### Advanced Features Include:

- Autaware® Software Compatible
- RS-232 or GPIB Automation Interfaces
- Patented SmartGFI®
- Patented Charge-LO/Ramp-HI (7700, 7704, 7710, 7720)
- 50 Memories (7705, 7710, 7715, 7720)
- 50 Memories w/ 8 Steps (7700, 7704)
- Rack Mountable
- Digital Arc Detection
- Electronic Ramp & Dwell Timers



Safety agency listed.

U.S. Patents: 6,549,385, 6,054,865, 5,936,419, 5,828,222 & 5,548,501. Other patents pending.



## **HYPOTULTRA® III** CE

HypotULTRA®III is a multi-function dielectric analyzer with an enhanced graphic LCD. It features two models: the 7620 AC Hipot tester and the 7650 AC/DC/IR tester. Both models include an optional 4-port or 8-port built-in scanner. An additional external modular scanner is available for use with both models. All models come standard with RS-232, ETHERNET, GPIB and Data Storage Interfaces are also available.

**7620** - 5kV @ 30mA AC With Optional Scanner

**7650** - 5kV @ 30mA AC, 5kV @ 10mA DC, & IR Test With Optional Scanner

### *Advanced Features Include:*

- Autoware® Software Compatible
- Ethernet, RS-232, or GPIB Automation Interfaces
- Data Storage Interface
- Patented SmartGFI®
- Patented Prompt & Hold Function
- Patented CAL-ALERT®
- Patented VERI-CHEK®
- Patented Charge-LO/Ramp-HI
- Scanner Interface
- Dual Continuity Test Modes
- 50 Memories with 30 steps per Memory
- Built-in Real Current Measurement
- Rack Mountable
- Digital Arc Detection
- Electronic Ramp & Dwell Timers



Safety agency listed.

U.S. Patents: 6,744,259, 6,549,385, 6,515,484 6,054,865, 5,936,419, 5,828,222 & 5,548,501. Other patents pending.



## **HYPOT® III** CE

Hypot® III is a bench top Dielectric Withstand tester with an enhanced graphic LCD. It features three models: the 3705 an AC Hipot model, the 3765 an AC / DC Hipot model and the 3770 an AC / DC Hipot model with built-in Insulation Resistance testing. All models feature an RS-232 interface for entry-level automation.

**3705** - 5kV @ 20mA AC

**3765** - 5kV @ 20mA AC, 6kV @ 7.5mA DC

**3770** - 5kV @ 20mA AC, 6kV @ 7.5mA DC & IR Test

### *Advanced Features Include:*

- RS-232 Interface Standard
- Patented SmartGFI®
- Patented CAL-ALERT®
- Patented VERI-CHEK®
- 10 Memories with 3 Steps per Memory
- Built-in Continuity Test
- Digital Arc Detection
- Electronic Ramp & Dwell Timers
- Remote Interlock

U.S. Patents: 6,744,259, 6,549,385, 6,515,484, 6,054,865 & 5,548,501. Other patents pending.

Safety agency listed.



## **HYAMP® III** CE

HYAMP®III is a microprocessor controlled Ground Bond tester with an enhanced graphic LCD. It features three models: the 3130 30 Amp model, the 3140 40 Amp model and the 3160 60 Amp model. HYAMP III can be interconnected with Hypot III to form a complete test system.

**3130** - 30 Amp Ground Bond

**3140** - 40 Amp Ground Bond

**3160** - 60 Amp Ground Bond

### *Advanced Features Include:*

- Patented CAL-ALERT®
- Patented VERI-CHEK®
- 10 Memories with 3 Steps per Memory
- PLC Remote Control
- Remote Interlock
- Electronic Ramp & Dwell Timers
- 4 Wire Measurement
- Milliohm Offset

Safety agency listed.



U.S. Patents: 6,744,259 & 6,515,484. Other patents pending.



**LINECHEK® II** CE **Model 620L**

The 620L is a stand alone Line Leakage tester with an enhanced graphic LCD which automates leakage testing in production and laboratory environments. The 620L can handle up to 40 Amps of current draw for DUT input power. It is designed to test to most safety agency standards for line leakage testing. All models come standard with RS-232. ETHERNET and GPIB Interfaces are also available.

Safety agency listed.



**HYPOT® II** **Model 4500D**

The 4500D is an entry level manual Dielectric Withstand tester with 500VA AC hipot test capability. It features full microprocessor control and can be used as a bench-top instrument or controlled through basic PLC Remote Control. It can also be interconnected to the HYAMP® III family of Ground Bond testers to form a complete test system in a single DUT connection. It is the perfect solution for entry level 500VA AC Hipot testing applications.

Safety agency listed.



**Model SC6540 Modular Scanning Matrix**

The SC6540 is ideal for applications requiring multi-point or multiple products testing. It can be configured with 8 HV, 16 HV, 8 HV and 8 GB, 8 GB or even 16 GB testing channels. The SC6540 is available as a master scanner with its own power module and GPIB and RS-232 interfaces or as a slave scanner that is run through any of our automated instruments.

Safety agency listed.



**Model AC1000 Power Source**

The AC1000 is a 1 kVA AC power source that is provided as a companion instrument to Associated Research's OMNIA and LINECHEK II products. The AC1000 can directly interface with these testers through the use of PLC inputs and outputs. This can provide customers with a versatile and efficient testing system.



**MEDTEST™**

MedTEST™ provides advanced test functionality while increasing efficiency for medical device manufacturers. It complies with test requirements called out in common medical electrical safety specifications such as UL2601, UL60601-1, IEC601-1, IEC60601-1, EN60601-1 and more. It performs patient lead testing on medical devices and also includes a continuous run feature. This feature can offer significant time savings as the Device Under Test (DUT) does not need to be powered down and up to perform the multiple leakage tests, even in reverse polarity conditions.

MedTEST™ can accommodate several types of tests including hipot, ground bond and various line leakage tests. MedTEST™ provides all this without requiring the test operator to disconnect and reconnect test leads to perform the different tests.





# autaware®

Software designed to store, analyze and retrieve data on automated Associated Research instruments while performing Line Leakage, Insulation Resistance, Dielectric Withstand, Ground Bond and Functional Run tests. Autaware also allows for bar coding inputs and provides basic statistical analysis graphs.

There is a version of Autaware available for each of our automated electrical safety compliance testers. To find the right version of Autaware for your instrument, see our web site at [www.asresearch.com/products/software](http://www.asresearch.com/products/software).



### 38814 - High Voltage Pistol Probe with Switch

This high voltage test gun has a dual action test trigger that controls the retractable probe tip and activates the high voltage output of the instrument. The unique ergonomic shape makes this probe easy and comfortable to use.



### 38081 - High Voltage Probe 38082 - Return Probe

Retractable high voltage and return probes for safe high voltage testing up to 5 kV. The probe tips allow for safe and easy testing by extending and retracting with the press of a button.



### 38539 - 2 Wire 40 Amp Ground Bond Probe 38538 - 4 Wire 40 Amp Ground Bond Probe

These fixed tip probes allow for easy contact with the grounding points of the DUT. Both probes have two separate test buttons making them comfortable to use in various positions. The test switch on the probes can be used to activate high current after making good contact with the test point. Both probes also come with three different styles of tips making it flexible enough to test a wide range of products.



### 35822 - Foot Switch

Ideal for use in applications where an operator needs to perform a test while using test probes.

Adapter boxes allow for safe and easy testing of line cord terminated products. All necessary connections are made within the adapter box helping to avoid connection errors. We offer adapter boxes for most of our products and have configurations that satisfy a variety of needs.

| Adapter Box Part Numbers |            |            |                         |       |            |
|--------------------------|------------|------------|-------------------------|-------|------------|
|                          | 36541      | 38482      | 36544                   | 38777 | 38578      |
| MODELS USED WITH         |            |            |                         |       |            |
| Configurations           | 3130, 7704 | 3140, 8104 | 37xx, 4500D, 76xx, 7700 | 620L  | 8105, 8106 |
| Universal US             | •          | •          | •                       | •     | •          |
| Universal UK             | N/A        | N/A        | N/A                     | •     | •          |
| European                 | •          | •          | •                       | •     | •          |
| Nema L5-20               | •          | •          | •                       | N/A   | N/A        |
| Nema L6-20               | •          | •          | •                       | N/A   | N/A        |
| IEC 60309                | •          | •          | •                       | N/A   | N/A        |



**We have local sales offices throughout  
the world to serve you more efficiently.**

To find your nearest representative visit the  
"Local Sales Offices" section of our web site at  
[www.asresearch.com](http://www.asresearch.com) or call us toll-free at 1-800-858-8378



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