



U.S. Patents: 6,744,259, 6,515,484.

# HYAMP® III



## Production Line Ground Bond Testers

Designed to thoroughly check the integrity of a safety ground circuit

### Model 3130

30 Amp Ground Bond Tester

### Model 3140

40 Amp Ground Bond Tester

### Model 3160

60 Amp Ground Bond Tester

## Features and Benefits

- Patented VERI-CHEK® feature prompts users through steps to validate the instrument's operation
- Graphic LCD provides intuitive menu system to simplify the entire testing process from set-up to results
- Patented CAL-ALERT® feature alerts the operator that the tester is due for re-calibration
- PLC Remote Control allows operators to remotely control the Ground Bond tester
- 10 Memories with 3 Steps per memory for storing and recalling test parameters
- Interconnects with an Associated Research Hipot tester to form a complete test system
- 4 wire measurement and milliohm offset for accurate Ground Bond test results
- Electronic Dwell timer for more consistent and reliable testing



**ASSOCIATED  
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## Input Specifications

<b>Voltage</b>	115/230 VAC ± 10%, user selectable
<b>Frequency</b>	50/60 Hz ± 5%
<b>Fuse - 3130</b>	6.3 A, slo-blow 250 VAC
<b>Fuse - 3140</b>	10 A, slo-blow 250 VAC
<b>Fuse - 3160</b>	15 A, slo-blow 250 VAC

## Ground Bond Test Mode

<b>Output Rating</b>	Current 3130: 1.00 - 30.00 A AC Voltage 3130: 6 V AC, fixed  Current 3140: 1.00 - 40.00 A AC Voltage 3140: 8 V AC, fixed  Current 3160: 1.00 - 60.00 A AC Voltage 3160: 9 V AC, fixed Resolution: 0.01 A Regulation: ± (2% of setting + 0.02 A)
<b>Output Frequency</b>	Range: 50 / 60 HZ, User Selectable
<b>Dwell Time Setting</b>	Range: 0 and 0.5 - 999.9 secs 0 for continuous running Resolution: 0.1 sec Accuracy: ± (0.1% of setting + 0.05 secs)
<b>Maximum &amp; Minimum Limits</b>	Range 3130: 0 - 120 mΩ for 1 - 30.00 A 0 - 510 mΩ for 1 - 10.00 A Accuracy 3130: ± (2% of setting + 2 mΩ)  Range 3140: 0 - 150 mΩ for 30.01 - 40.00 A 0 - 200 mΩ for 10.01 - 30.00 A 0 - 600 mΩ for 1.00 - 10.00 A Accuracy 3140: ± (3% of setting + 3 mΩ)  Range 3160: 0 - 150 mΩ for 30.01 - 60.00 A 0 - 300 mΩ for 15.01 - 30.00 A 0 - 600 mΩ for 6.00 - 15.00 A Accuracy: ± (3% of setting + 3 mΩ)
<b>Offset Capability</b>	Range: 0 - 100 mΩ Resolution: 1 mΩ Accuracy: ± (2% of setting + 2 mΩ)
<b>Current Display 3130</b>	Range: 0.00 - 30.00 A Resolution: 0.01 A / step Accuracy: ± (2% of reading + 0.02 A)
<b>Current Display 3140</b>	Range: 0.00 - 40.00 A Resolution: 0.01 A Accuracy: ± (3% of reading + 0.03 A)
<b>Current Display 3160</b>	Range: 0.00 - 60.00 A Resolution: 0.01 A Accuracy: ± (3% of reading + 0.03 A)
<b>Ohmmeter Display 3130</b>	Range: 0 - 510 mΩ Resolution: 1 mΩ / step Accuracy: ± (2% of reading + 0.02 A)
<b>Ohmmeter Display 3140</b>	Range: 0 - 150 mΩ for 30.01 - 40.00 A 0 - 200 mΩ for 10.01 - 30.00 A 0 - 600 mΩ for 6.00 - 10.00 A Resolution: 1 mΩ Accuracy: ± (2% of reading + 2 mΩ)  Range: 0 - 600 mΩ for 1.00 - 5.99 A Resolution: 1 mΩ Accuracy: ± (3% of reading + 3 mΩ)

## Ground Bond Test Mode (Continued)

<b>Ohmmeter Display 3160</b>	Range: 0 - 150 mΩ for 30.01 - 60.00 A 0 - 300 mΩ for 15.01 - 30.00 A 0 - 600 mΩ for 6.00 - 15.00 A Resolution: 1 mΩ Accuracy: ± (2% of reading + 2 mΩ)  Range: 0 - 600 mΩ for 1.00 - 5.99 A Resolution: 1 mΩ Accuracy: ± (3% of reading + 3 mΩ)
<b>Timer Display</b>	Range: 0.0 - 999.9 secs Resolution: 0.1 secs Accuracy: ± (0.1% of reading + 0.05 secs)

## General Specifications

<b>Remote Control &amp; Signal Output</b>	The following input and output signals are provided through two 9 pin D type connectors: 1. Remote control: Test, Reset, Interlock, and Withstand Processing 2. Remote recall of memory program #1, #2, and #3 3. Outputs: Pass, Fail, Test-in-process, Start Out and Reset Out
<b>Program Memory</b>	10 Memories, 3 steps per memory.
<b>Security</b>	Key Lock capability to avoid unauthorized access to all test parameters and memory locations.
<b>Mechanical</b>	Bench or rack mount with tilt up feet.
<b>Dimensions 3130</b>	(W x H x D) 8.5 x 4.0 x 15.5 in. (216 x 103 x 390 mm) includes feet
<b>Dimensions 3140</b>	(W x H x D) 8.5 x 4.0 x 16.9 in. (216 x 103 x 430 mm) includes feet
<b>Dimensions 3160</b>	(W x H x D) 16.9 x 5.1 x 15.7 in. (430 x 130 x 400 mm) includes feet
<b>Weight 3130</b>	19.15 lbs (8.7 kgs)
<b>Weight 3140</b>	30.9 lbs (14 kgs)
<b>Weight 3160</b>	49.40 lbs (22.40 kgs)
<b>Calibration</b>	Traceable to National Institute of Standards & Technology (NIST). Calibration controlled by software. Adjustments are made through front panel keypad in a restricted access calibration mode. Calibration information stored in non-volatile memory.

## Available Accessories

<b>Probe (38084)</b>	Fixed tip 4-wire Ground Bond probe for use with the 3130.
<b>Probe (38538)</b>	Fixed tip 4-wire Ground Bond probe for use with the 3140.

Specifications subject to change without notice.



- Customer support & technical services
- 5-Year extended warranty\*
- 24-Hour turn-around on calibrations
- Industry seminars, expert training & education programs
- Local sales offices throughout the world

\*With annual calibration from Associated Research.