

Instruments for

ELECTRICAL SAFETY COMPLIANCE TESTING



- HIPOT TESTERS
- GROUND BOND TESTERS
- INSULATION RESISTANCE
- LINE LEAKAGE TESTERS
- FUNCTIONAL RUN TESTERS
- MEDICAL TEST SYSTEMS
- HV/HC SCANNING MATRICES
- SOFTWARE SOLUTIONS

HYAMP® III



Safety agency listed.



Choose from the following at no charge:



Model 3145 only

The industry-leading production line Ground Bond tester.

Our HYAMP III series of manual Ground Bond testers verifies the integrity of your product's ground circuitry in a convenient cabinet design. Choose from 4 different models with varying output current capabilities in compliance with international standards on the production line or in the lab. Choose to operate the HYAMP III from our intuitive user interface or utilize the PLC I/O. Accurate 4-wire measurement and milliohm offset capability ensure your test results are accurate. Use the HYAMP III stand-alone or interconnect with a Hypot III or HypotULTRA III to form a complete safety compliance test system.

	30A Ground Bond	40A Ground Bond	60A Ground Bond
3130	✓		
3140		✓	
3145		DC only	
3160			✓

PRODUCTIVITY-ENHANCING FEATURES



Basic PLC relay control



Includes preset verification tests



Tracks and alerts for calibration



Interconnect with a Hypot III or HypotULTRA III to form a complete safety compliance test system



Accredited calibration options available

SAFETY FEATURES



Easily disable HV output

Input Specifications

Voltage	115/230 VAC ± 10%, user selectable 100-120 / 200-240 VAC ± 10%, auto-detection
Frequency	50/60 Hz ± 5%
Fuse - 3130	6.3 A, Slow Blow 250 VAC
Fuse - 3140	10 A, Slow Blow 250 VAC
Fuse - 3145	10 A, Slow Blow 250 VAC
Fuse - 3160	15 A, Slow Blow 250 VAC

Ground Bond Test Mode

Output Rating	Current 3130: 1.00 - 30.00 AAC Voltage 3130: 6 VAC, fixed Current 3140: 1.00 - 40.00 AAC Voltage 3140: 8 VAC, fixed Current 3145: 1.00 - 40.00 Amps DC Voltage 3145: 8 Volts DC, maximum Current 3160: 1.00 - 60.00 AAC Voltage 3160: 9 VAC, fixed
Output Frequency 3130/3140/3160	Range: 50 / 60 Hz, User Selectable
Dwell Time Setting	Range: 0 and 0.5 - 999.9 secs 0 for continuous running Resolution: 0.1 sec Accuracy: ± (0.1% of setting + 0.05 secs)
Maximum & Minimum Limits	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 3145: 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 3145: ± (2% of reading + 2 counts) Range 3160: 0 - 150 mΩ for 30.01 - 60.00 A 0 - 300 mΩ for 15.01 - 30.00 A 0 - 600 mΩ for 1.00 - 15.00 A Accuracy 3160: ± (3% of setting + 3 mΩ)
Offset Capability	Range: 0 - 100 mΩ Resolution: 1 mΩ Accuracy: ± (2% of setting + 2 mΩ)
Current Display 3130	Range: 0.00 - 30.00 A Resolution: 0.01 A / step Accuracy: ± (3% of reading + 0.03 A)
Current Display 3140	Range: 0.00 - 40.00 A Resolution: 0.01 A Accuracy: ± (3% of reading + 0.03 A)
Current Display 3145	Range: 0.00 - 40.00 A Resolution: 0.01 A Accuracy: ± (3% of reading + 0.03 A)
Current Display 3160	Range: 0.00 - 60.00 A Resolution: 0.01 A Accuracy: ± (3% of reading + 0.03 A)

Ground Bond Test Mode (Continued)

Ohmmeter Display 3130	Range: 0 - 510 mΩ Resolution: 1 mΩ / step Accuracy: ± (2% of reading + 2 mΩ)
Ohmmeter Display 3140	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)
Ohmmeter Display 3145	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 counts) Range: 0 - 600 mΩ for 1.00 - 5.99 A Resolution: 1 mΩ Accuracy: ± (3% of reading + 3 mΩ)
Ohmmeter Display 3160	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)
Timer Display	Range: 0.0 - 999.9 secs Resolution: 0.1 secs Accuracy: ± (0.1% of reading + 0.05 secs)

General Specifications

Mechanical	Bench or rack mount with tilt up feet.
Dimensions 3130	(W x H x D) 8.5 x 4.0 x 15.5 in. (216 x 103 x 390 mm) includes feet
Dimensions 3140	(W x H x D) 8.5 x 4.0 x 16.9 in. (216 x 103 x 430 mm) includes feet
Dimensions 3145	(W x H x D) 8.5 x 4.0 x 15.0 in. (216 x 103 x 370 mm) includes feet
Dimensions 3160	(W x H x D) 16.9 x 5.1 x 15.7 in. (430 x 130 x 400 mm) includes feet
Weight 3130	19.15 lbs (8.7 kg)
Weight 3140	30.9 lbs (14 kg)
Weight 3145	11.55 lbs (5.23 kg)
Weight 3160	49.40 lbs (22.40 kg)
Remote Control & Signal Output	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
Program Memory	10 Memories, 3 steps per memory
Interface	RS-232 Standard for Model 3145 Optional external RS-232 interface for Model 3130

Specifications subject to change without notice.

For more information on testing to a specific standard, refer back to the Common Safety Standard Reference Chart.