

Our HYAMP® III Series of manual Ground Bond instruments verifies the integrity of your product's ground circuitry in a convenient benchtop 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® to form a complete safety compliance test system.



AVAILABLE INTERFACES



SAFETY & PRODUCTIVITY FEATURES







Interlock Easily disable HV output

Remote relay control

Basic PLC

Includes preset verification tests







Cal-Alert

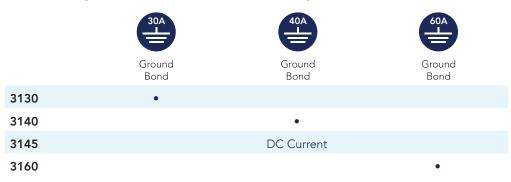
Interconnection Accredited Cal

Tracks and alerts for calibration

Interconnect with Hypot III to form a complete test system

Accredited calibration options available

Find the Right Model that Fits Your Testing Needs



INPUT SPECIFICATIONS

Voltage Model 3145 Only:

115/230 VAC ± 10%, user selectable 100-120 / 200-240 VAC ± 10%, auto-detection

 $50/60 \text{ Hz} \pm 5\%$ Frequency

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 15 A, Slow Blow 250 VAC Fuse - 3160

GROUND BOND TEST MODE

1.00 - 30.00 AAC 6 VAC, fixed 1.00 - 40.00 AAC **Output Rating** Current 3130: Voltage 3130: Current 3140:

8 VAC, fixed 1.00 - 40.00 Amps DC Voltage 3140: Current 3145: Voltage 3145: 8 Volts DC, maximum 1.00 - 60.00 AAC Current 3160:

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: \pm (0.1% of setting + 0.05 secs)

Maximum & Minimum Limits

Range 3130: $0 - 120 \text{ m}\Omega$ for 1 - 30.00 A $0 - 510 \text{ m}\Omega \text{ for } 1 - 10.00 \text{ A}$

Accuracy 3130: Range 3140: \pm (2% of setting + 2 m Ω) 0 - 150 m Ω for 30.01 - 40.00 A

 $200 \text{ m}\Omega$ for 10.01 - 30.00 A $0 - 600 \text{ m}\Omega$ for 1.00 - 10.00 ASame as Ohmmeter Display

Accuracy: Range 3145: $0 - 150 \text{ m}\Omega$ for 30.01 - 40.00 A $0 - 200 \text{ m}\Omega$ for 10.01 - 30.00 A

0 – 200 mΩ for 1.00 – 30.00 A Same as Ohmmeter Display 0 - 150 mΩ for 30.01 - 60.00 A 0 - 300 mΩ for 15.01 - 30.00 A Accuracy: Range 3160:

 $0 - 600 \text{ m}\Omega$ for 1.00 - 15.00 ASame as Ohmmeter Display

 $0 - 100 \, \text{m}\Omega$ Offset Capability Range:

Accuracy 3160:

Resolution:

1 m Ω ± (2% of setting + 2 m Ω) Accuracy:

0.00 - 30.00 A Current Display 3130 Range:

0.01 A / step Resolution:

Accuracy: \pm (3% of reading + 0.03 A)

Current Display 3140 Range: 0.00 - 40.00 A

Resolution: 0.01 A

 \pm (3% of reading + 0.03 A) Accuracy:

Current Display 3145 Range: 0.00 - 40.00 A

Resolution:

Accuracy: \pm (3% of reading + 0.03 A)

Current Display 3160 Range: 0.00 - 60.00 A

Resolution:

 \pm (3% of reading + 0.03 A) Accuracy:

GROUND BOND TEST MODE (CONTINUED)

Range: $0 - 510 \text{ m}\Omega$ Resolution: Ohmmeter Display

 \pm (2% of reading + 2 m Ω) 0 - 150 m Ω for 30.01 - 40.00 A 0 - 200 m Ω for 10.01 - 30.00 A Accuracy: Ohmmeter Display 3140 Range: $0 - 600 \text{ m}\Omega$ for 6.00 - 10.00 A

 $1~\text{m}\Omega$ \pm (2% of reading + 2 m Ω) 0 - 600 m Ω for 1.00 - 5.99 A Resolution: Accuracy: Range: Resolution: $1\,\mathrm{m}\Omega$

 \pm (3% of reading + 3 m Ω) 0 - 150 m Ω for 30.01 - 40.00 A 0 - 200 m Ω for 10.01 - 30.00 A Accuracy: Ohmmeter Display Range:

3145 $0 - 600 \text{ m}\Omega$ for 6.00 - 10.00 A

Resolution: \pm (2% of reading + 2 counts) 0 - 600 m Ω for 1.00 - 5.99 A Accuracy: Range:

Resolution: $1\,\mathrm{m}\Omega$ \pm (3% of reading + 3 m Ω) 0 - 150 m Ω for 30.01 - 60.00 A Accuracy:

Ohmmeter Display Range: 0 - 300 mΩ for 15.01 - 30.00 A 0 - 600 mΩ for 6.00 - 15.00 A 3160

Resolution: \pm (2% of reading + 2 m Ω) 0 - 600 m Ω for 1.00 - 5.99 A Accuracy: Range: Resolution: \pm (3% of reading + 3 m Ω) Accuracy:

0.0 - 999.9 secs Timer Display Range:

Resolution: 0.1 secs \pm (0.1% of reading + 0.05 secs) Accuracy:

GENERAL SPECIFICATIONS

Bench or rack mount with tilt up feet. Mechanical

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 3.5 x 15.0 in. (216 x 89 x 370 mm)

 $(W \times H \times D) 16.9 \times 5.1 \times 15.7 \text{ in. } (430 \times 130 \times 400 \text{ mm})$ **Dimensions 3160**

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 & The following input and output Signal Output signals are provided through two 9 pin

type connectors

Remote control: Test, Reset, Interlock, and Withstand Processing

Remote recall of memory program #1, #2, and #3 Outputs: Pass, Fail, Test-in-process, Start Out

and Reset Out

Program Memory 10 Memories, 3 steps per memory

RS-232 Standard for Model 3145 Interface

Optional external RS-232 interface for Model 3130

Why We Use Counts

Associated Research publishes some specifications using "counts" which allows us to provide a better indication of the tester's capabilities across measurement ranges. A count refers to the lowest resolution of the display for a given measurement range. For example, if the resolution for voltage is 1V then 2 counts=2V. Specifications subject to change without notice.