



Instruments for Electrical Safety Compliance Testing



 **Order Now!**

Entry-level Dielectric Withstand testers with simple PLC control for production line safety agency compliance testing.

 **FEATURES/BENEFITS**  **SPECIFICATIONS**  **OPTIONS**  **3D TOUR**

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HYPOT II

Features & Benefits

Feature No load setup of trip current and output voltage.

Benefit This provides the operator with an easy and safe way to set trip currents and output voltages since parameters are set without high voltage activated.

Feature Automatic storage of test program.

Benefit Hypot II powers up with the parameters that were used during the last test to avoid operator setup errors.

Feature All parameters for the setups can be adjusted through a simple menu driven program.

Benefit The easy to follow setup screens ensure that the operator correctly sets up all test parameters.

Feature Tamper proof front panel controls.

Benefit Front panel controls can be locked via an ON/OFF setting in the setup menu.

Feature Line and load regulation.

Benefit This system maintains the output voltage to within 1% of settings from no load to full load and over the line voltage range to ensure that test results remain consistent and within safety agency requirements.

Feature Low current monitoring to 100 microamps AC and 20 microamps DC.

Benefit This allows the Hypot II to be used even when test requirements only allow a very low level of acceptable leakage current.

Feature Electronic dwell settings.

Benefit The electronic dwell control helps keep test results consistent by ensuring that the test duration is the same for each product tested.

Feature Front panel LCD displays test parameters and results.

Benefit A front panel LCD allows the operator to monitor the test. The display holds the results after a test item failure so that the operator can easily review the test results. Indications of high fail and continuity failure are clearly displayed.

Feature **Maximum output current 12 milliamps AC and 5 milliamps DC.**

Benefit This instrument is a true hipot tester with enough output current to test capacitive loads in AC mode and allows compliance to the UL "120 K ohm" requirement.

Feature **User selectable output voltage frequencies of 50 or 60 hertz.**

Benefit Hypot II was designed for the global compliance safety market. Its design makes it easy for the operator to select the proper output frequency (in the AC hipot mode), so that products can be tested at the same frequency at which they will be used.

Feature **Non-invasive front panel calibration.**

Benefit Complete calibration is performed through the front panel. No need to open the instrument and expose technician to high voltage.

Feature ***Low-current sense.**

Benefit Monitors the minimum level of current flow, thus ensuring that the DUT is properly connected and that the hipot test is being performed.

Feature ***Electronic ramping.**

Benefit Provides a gradual and timed method to increase output voltage to the DUT, minimizing any damage from quickly over-applying high voltage to sensitive DUT's.

Feature ***Test setup memories.**

Benefit With the built in IR test capability in model 3570D, an IR test may be performed alone or in conjunction with an AC or DC hipot test. The 2 M Ω range complies with agency specifications such as IEC.

*Only available on 3505D, 3565D and 3570D.

**Only available on 3570D.

**HYPOT[®] II****Specifications**

INPUT	115/230V selectable, $\pm 15\%$ variation 47-63 Hz
FUSE	115 VAC, 230VAC -- 2A fast acting 250VAC
OUTPUT	Rating: AC 0-5000V, 2V/step, 12 mA DC 0-6000V, 2V/step, 5 mA (3565D & 3570D) Regulation: $\pm (1\% \text{ of output} + 5V)$
VOLTAGE SETTING	0V-Max output rating, 10 volts/steps Accuracy: $\pm (2\% \text{ of Setting} + 5V)$ (relative to displayed output) Can be adjusted during operation via UP and DOWN arrow keys.
OUTPUT FREQUENCY	3500D and 3505D: 50/60 Hz selectable 3565D & 3570D: DC and 50/60 Hz selectable
WAVE FORM	Sine wave, Distortion: $< 2\%$ THD
RIPPLE	$< 5\%$ at 6 KV DC/5 mA (for model 3565D & 3570D DC mode only)
DWELL TIME SETTING	0 and 0.2-999.9 second, 0.1 second/steps "0" for continuous running
RAMP TIME SETTING*	0.2 - 999.9 seconds in 0.1 second increments 0 ramp setting = 0.1 seconds fixed
FAILURE SETTINGS	AC mode High limit: 0.10 - 12.00 mA, 0.01 mA/steps Accuracy: $\pm (2\% \text{ of setting} + 0.02 \text{ mA})$ DC mode High limit: 0.02 - 5.00 mA, 0.01 mA/steps Accuracy: $\pm (2\% \text{ of setting} + 0.02 \text{ mA})$
METERING	Voltmeter (3 digits) Range: AC 0.00 - 5.00 KV DC 0.00 - 6.00 KV Resolution: .01 KV Accuracy: $\pm (2\% \text{ of reading} + 10 \text{ V})$ Ammeter (4 digits) Range: AC 0.10 - 12.00 mA DC 0.02 - 5.00 mA Resolution: .01 mA Accuracy: $\pm (2\% \text{ of reading} + 0.02 \text{ mA})$
TIMER DISPLAY	Range: 0.0 - 999.9 seconds Resolution: 0.1 second Accuracy: $\pm (0.1\% \text{ of reading} + 0.05 \text{ seconds})$

GROUND CONTINUITY CHECK	Current: DC 0.1A \pm 0.01A, fixed Max. ground resistance: 1 ohm \pm 0.1 ohm, fixed
REMOTE CONTROL AND SIGNAL OUTPUT	The following input and output signals are provided through the 9 pin D type connector: 1. Inputs: test and reset 2. Outputs: pass, fail, and test in process
SECURITY	Lockout capability to avoid unauthorized access to test set-up program.
LINE CORD	Detachable 7 ft. (2.13m) power cable terminated in a three prong grounding plug.
TERMINATIONS	5 ft. (1.52 m) high voltage and return leads (2) with clips and a standard U.S. style (NEMA 5-15) remote receptacle box for testing items terminated with a line cord. International receptacles also available.
MECHANICAL	Tilt up front feet Dimensions: (W x H x D) 11 x 3.5 x 14.56 inches (280 x 89 x 370mm) Weight: 20 lbs. (9 Kgs)
ENVIRONMENTAL	Operating Temperature: 32° - 113°F (0° - 45° C) Relative Humidity: 0 to 95%
CALIBRATION	Traceable to National Institute of Standards and 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.
LOW CURRENT SENSE*	3505D: 0.00 - 12.00 mA AC Accuracy: \pm (2% of setting + 0.02 mA) 3565D & 3570D: 0.00 - 12.00 mA AC, 0.00 - 5.00 mA DC Accuracy: \pm (2% of setting + 0.02 mA)
MEMORY*	Allows storage of up to 5 different test programs
IR TEST**	Range: 1M Ω - 1000 M Ω Accuracy: \pm (3% of reading + 2 counts) > 500 Volts \pm (7% of reading + 2 counts) < 500 Volts Voltage: 100 - 1000VDC in 10V step Accuracy: \pm (2% of reading + 2 counts) Failure Settings: High/Lo limit 1 M Ω - 1000 M Ω IR Delay Range: 0, 0.5 - 999.9 seconds (0=constant) Resolution: 0.1 seconds Accuracy: \pm (0.1% of reading + 0.05 seconds)

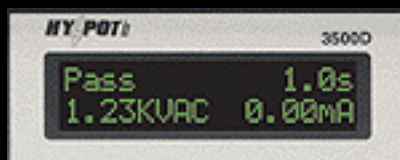
Only available on 3505D, 3565D and 3570D. *

Only available on 3570D. **



Hypot II includes rear panel remote control connections to make it easier to build into an automated system. As an option, rear panel high voltage and return terminals can also be provided.

High resolution LCD clearly indicates set-up parameters and test results.



Display shows a pass condition for a AC withstand test.



Display shows a LO-fail condition on a AC withstand test. Minimum current not met.



Display shows a ground continuity failure for a DC withstand test.



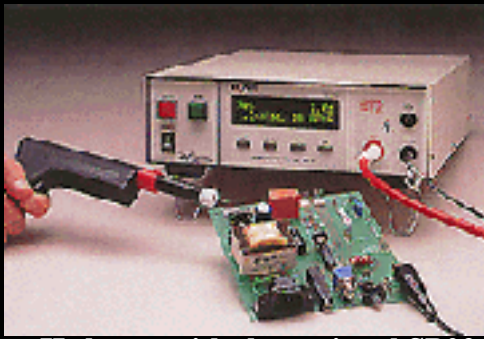
Display shows setup parameters stored in Memory 5.



Display shows a HI-fail condition for an insulation resistance test.



Display shows a pass condition for an insulation resistance test.



Hypot II shown with the optional SP02 high voltage test probe. (See [accessories](#))



Hypot II shown with standard remote receptacle box for testing products terminated in a line cord.



Options	
Part Number	Description
1-01	Rear Panel Outputs (HV, Return, Continuity)
2-03	Remote Interlock
3-04	Arc Detection Function