

Microprocessor-Controlled Digital

Hipot Testers

Models 1305, 2503, 2510 & 2550
For Production Line Safety Compliance Testing



Microprocessor- Control Provides...

USER SAFETY:

- No High Voltage Present During Setup
- Front Panel Calibration

EASE OF USE:

- Simple Front Panel Controls
- Easy-to-Read LED Display
- Test Parameters Stored in Memory

RELIABILITY:

- Tamper-Resistant Front Panel Controls
- Line & Load Regulation for Consistent Testing

Slaughter
Instruments for Electrical
Test & Measurement

Slaughter

The name you have come to know and trust for over 50 years in Electrical Safety Testing Instruments now brings you a revolutionary new line of high-performance, low-cost, bench-top safety compliance testers.

These AC and DC hipots, packed with features previously only found in instruments costing hundreds of dollars more, provide the enhanced capabilities, safety features, and reliability made possible by microprocessor technology at realistic and affordable prices, below what you would expect to pay for older analog technology.

Designed for high-speed, high-volume production line testing, these portable, rugged, easy-to-use instruments are equally well suited for the needs of large and small businesses alike, setting a new industry standard for price/performance.

Please take a few minutes to review the many features and benefits outlined below, along with the detailed product specifications on the accompanying pages. We think you will agree that these hipots are the safest, most reliable and cost-effective production line testers available today!



Features & Benefits

FEATURE

Agency Compliance

No High Voltage Present During Setup

Front Panel Calibration

Tamper-Resistant Front Panel Design

LED Display With Meter Memory

Line & Load Regulation

Electronic Ramp & Dwell

Ground Continuity

PLC Remote Control

BENEFIT

All models meet the UL 120K Ω test requirement, and three (Models 2503, 2510 and 2550) meet most UL, CSA, VDE and IEC testing requirements. All units feature audible and visual failure alarms, and shut off high voltage upon reject.

Operators can set output voltages and trip currents to desired levels in the absence of any high voltage, a key safety feature that conventional analog hipot testers lack.

Annual calibrations can be performed safely and efficiently on these instruments using the front panel controls. This eliminates the need for a technician to open the instrument with high voltage present, an important safety feature.

Prevents operators from inadvertently or accidentally modifying test parameters, and ensures consistent and reliable test results, minimizing the need for costly and time consuming product re-testing.

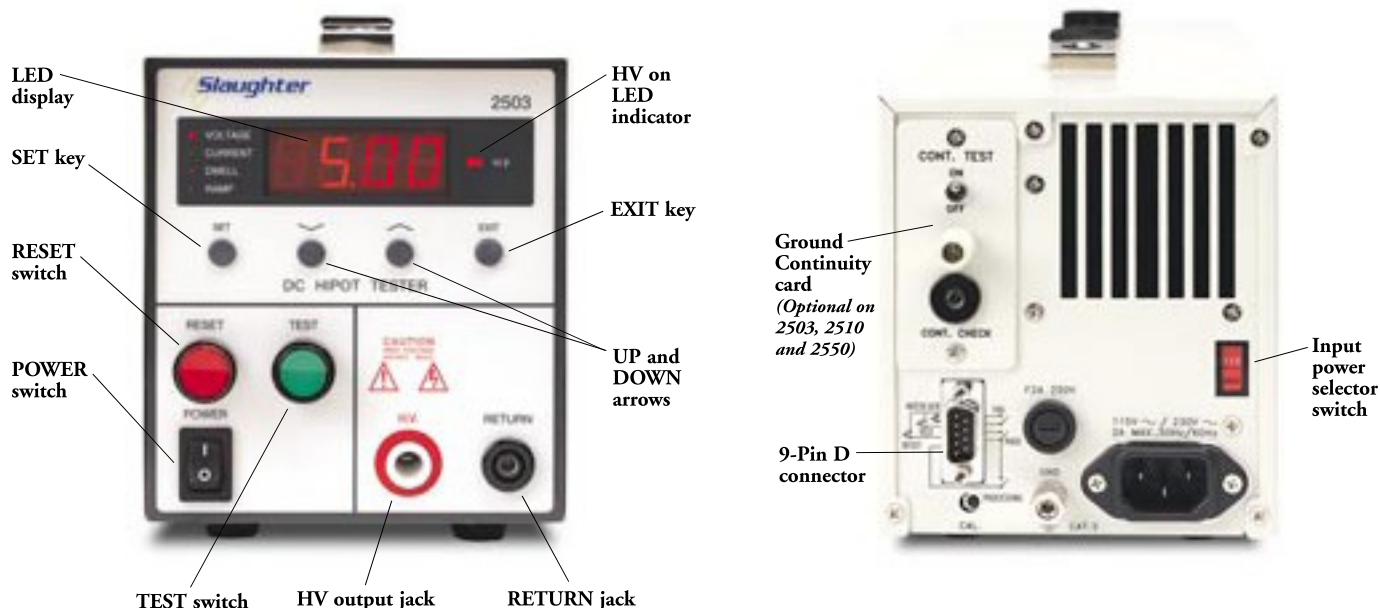
Easy-to-read digital display simplifies the task of setting test parameters and interpreting test results, which reduces errors and makes the operator's job easier. Meter memory allows operators to review last test results, including breakdown voltage on models with ramping.

Tests are more repeatable and reliable, since proper voltage is consistently applied to all devices being tested, regardless of fluctuations in line input voltage or the load created by the device under test.

Required by some outside agencies, but until now only available in instruments costing hundreds of dollars more. This feature ensures that voltage is consistently increased to a preset level during a test and is maintained at that level for a specified period of time.

Available with select models, this option, when combined with our remote receptacle box, allows customers to verify ground continuity in products with grounded line cords.

A standard 9-pin interface provides outputs for Pass, Fail and Test in Process. It also provides inputs for Test, Reset and Safety Interlock. This gives the user all the basic remotes required to configure these instruments through simple PLC relay control.



µP-Controlled Hipot Specifications



Model 1305

- Basic Agency Compliance including UL 120KΩ
- 0.00-5.00mA AC Trip
- Continuous & Momentary Dwell
- Includes:
HV Retracting Safety Probe & Lead
Ground Return Clip & Lead
NIST Traceable Certificate
- Remote Receptacle (*optional*)



Models 2503/2510

- Meets most UL, CSA, VDE & IEC requirements, including UL 120KΩ
- 0.00-3.00mA DC Trip (model 2503)
- 0.00-10.00mA AC Trip (model 2510)
- Includes:
HV Retracting Safety Probe & Lead
HV Clip & Lead
Ground Return Clip & Lead
NIST Traceable Certificate
- Remote Receptacle (*optional*)



AC/DC Model 2550

- Meets most UL, CSA, VDE & IEC requirements, including UL 120KΩ
- 0.00-3.00mA DC Trip
- 0.00-10.00mA AC Trip
- Includes:
HV Retracting Safety Probe & Lead
HV Clip & Lead
Ground Return Clip & Lead
NIST Traceable Certificate
- Remote Receptacle (*optional*)

	1305 3.0 kV	2503 5.0 kV	2510 5.0 kV	2550 5.0 kV
AC Hipot	●		●	●
DC Hipot		●		●
Ground Continuity (<i>optional</i>)		●	●	●
Meter Memory		●	●	●
Electronic Ramp & Dwell		●	●	●
Line & Load Regulation	●	●	●	●
No-Load Setup	●	●	●	●
Setup Storage	●	●	●	●



INSTRUMENT SPECIFICATIONS			
MODEL	1305	2510, 2550	2503, 2550
INPUT VOLTAGE	115/230V selectable, $\pm 15\%$ variation; 47 - 63 Hz		
FUSE	115 VAC, 230 VAC – 2A fast acting 250 VAC		
OUTPUT	Rating: Regulation:	AC 0 - 3000V, 5 mA $\pm (1\% \text{ of output} + 5V)$	AC 0 - 5000V, 10 mA $\pm (1\% \text{ of output} + 5V)$
VOLTAGE SETTING	Accuracy:	0.01KV - 3KV, 10 volts/step $\pm (2\% \text{ of setting} + 5V)$ (relative to displayed output)	0.01KV - 5KV, 10 volts/step $\pm (2\% \text{ of setting} + 5V)$ (relative to displayed output)
RIPPLE		N/A	< 5% at 5 KV DC/3 mA
DWELL TIME SETTING		ON = Continuous OFF = Momentary	0 = Continuous 1 = One Second Test; 60 = Sixty Second Test
RAMP SETTING		N/A	0 and 0.2 – 999.9 seconds, 0.1 second/step 0 ramp setting = 0.1 seconds fixed ramp
PULSE		ON = Automatic reset after failure OFF = Manual reset after failure	N/A
FAILURE SETTING	High Limit: Accuracy:	0.00 - 5.00 mA, 0.01 mA/step $\pm (2\% \text{ of setting} + 0.02 \text{ mA})$	0.00 - 10.00 mA, 0.01 mA/step $\pm (2\% \text{ of setting} + 0.02 \text{ mA})$
METERING		Exit key used to toggle between KV and mA	
	Voltmeter:	3 digits	4 digits
	Range:	AC 0.00 - 3.00 KV	AC 0.00 - 5.00 KV
	Resolution:	0.01 KV	0.01 KV
	Accuracy:	$\pm 2\% \text{ of reading} + 10 \text{ V}$	$\pm 2\% \text{ of reading} + 10 \text{ V}$
	Ammeter:	N/A	4 digits
	Range:	N/A	AC 0.00 - 10.00 mA
	Resolution:	N/A	0.01 mA
	Accuracy:	N/A	$\pm 2\% \text{ of reading} + 0.02 \text{ mA}$
TIMER	Range:	N/A	0.0 - 999.9 seconds
DISPLAY	Resolution:	N/A	0.1 second
	Accuracy:	N/A	$\pm 0.1\% \text{ of reading} + 0.05 \text{ seconds}$
GROUND CONTINUITY CHECK (OPTIONAL)		N/A	Current: DC 0.1A $\pm 0.01A$, fixed Max. ground resistance: 1 ohm $\pm 0.1 \text{ ohm}$, fixed Included with this option is a U.S. style (NEMA 5-15) remote receptacle box for testing items terminated with a line cord. International receptacle boxes available.
REMOTE INPUT		Test start input through a 9-pin D type connector.	The following input and output signals are provided through the 9-pin D type connector; 1. Remote Control: Test, Reset and Safety Interlock 2. Outputs: Pass, Fail and Test in Process
LINE CORD		Detachable 7 ft. (2.13m) power cable terminated in a three prong grounding plug.	
TERMINATIONS		HV Safety Retracting Probe with 6 ft. (1.82m) Lead. Ground Return Clip with 6 ft. (1.82m) Lead	HV Safety Retracting Probe with 6 ft. (1.82m) Lead. HV Clip with 6 ft. (1.82m) Lead. Ground Return Clip with 6 ft. (1.82m) Lead.
MECHANICAL	Dimensions: Weight:	(W x H x D) 4.75 x 5.75 x 14.50 in. (120 x 146 x 370 mm) 16.0 lbs. (7.25 Kgs)	

For additional information and product specifications please contact us at **Toll Free: 1-800-504-0055**

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