

# **MULTI-HIPOT TESTER** MODEL: 19052/19053/19054

#### **Complete Dielectric Testing Solution**

The Chroma Hipot Tester 19050 series provide 3 models for choice. The 19052 for AC/DC/IR Hipot testing and insulation resistance (IR) measurements; and the 19053 which combines both AC and DC Hipot tests and IR measurements with 8HV scan channel capability into a single compact unit. The front panesl of the fevers make them easy to operate and the 19054 which combines both AC and DC Hipot tests and IR measurements eith 4HV scan channel capability into a single compact unit. Digital display and user friendly control allows test parameters and limits to be set easily without the high voltage activating.

The 19050 series electrical safety tester are advanced digital hipots with load and line regulation to ensure the measurement integrity. Multi-step capability allows users to perform multiple tests in a sequence such as AC hipot followed by IR.

The 19052 AC/DC/IR Hipot Tester performs AC/DC dielectric withstand (hipot) tests. The test of AC voltage can be programmed in the range of 50V AC to 5kV AC with a resolution of 2V. Its maximum total output current is 30mA. The test of DC voltage can be programmed in the range from 50V DC to

6kV DC with a resolution of 2V. The maximum total current is 10mA. The IR measurement range is from  $1M\Omega$  to  $50G\Omega$  with test voltages from 50 to 1000V DC. The 19053 AC/DC/IR/SC Hipot Tester has all of the features of the 19052 plus 8HV Scan Channels for multi-point testing, and the 19054 AC/DC/IR/SC Hipot Tester has all of the features of the 19052 plus 4HV Scan Channels for multi-point testing.

#### **Quick Discharge**

In DC hipot and IR tests the device under test is discharged back through the HV transformer. This technique results in a rapid and safe discharge.

# **Ground Continuity Check**

All of the 19050 series testers have a ground continuity check feature to determine the resistance, that is between the ground blade of power cord and any exposed metal on the product, is less than  $1\Omega$ .

#### **Ground Fault Interrupters(GFI)**

GFI is required by the National Electrical Code in wet locations. Such devices automatically interrupt power when a ground current > 0.5mA exists for more than a few milli-seconds to protect users.









# **Multi-Hipot Tester**

# **MODEL 19052** 19053 19054

# Key Features:

- Ground Fault Interruption shutdown current > 0.5mA, provide the highest protection capability
- TUV approved (19052/19054)
- CE certified (19052/19054)
- Programmable output voltage up to 5kV AC and 6kV DC
- Insulation resistance measurements from 1M $\Omega$  to 50G $\Omega$
- $\blacksquare$  Ground continuity check with  $1\Omega$  Limit
- Arc detection with programmable limit
- Large LCD display (240 x 64dot matrix) can supply great view of test result and setting functions
- Programmable high and low limits
- Programmable ramp and test times
- Front panel lockout
- Quick discharge of DUT in IR and DC hipot
- Storage of 99 test setups with multiple steps per measurement
- Remote control & Printer/RS-232/GPIB
- Real or total current measurement
- 8 channels scanner (19053)
- 4 channels scanner (19054)
- EMC only (19053)



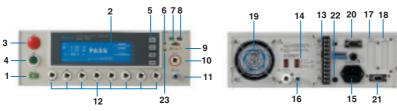


# **Specification**

Vilhstanding Voltage Test	Model	19052	19053	19054	
Withstanding Voltage         AC : 0.05 – 5kV, DC : 0.05 – 6kV           Load Regulation         1% + 5V           Voltage Resolution         2V           Voltage Accuracy         1% + 5 counts           Cutoff Current         AC : 30mA, DC : 10mA           Current Resolution         AC : 1 μA, DC : 0.1 μA           Current Accuracy         1% + 5 counts (5% + 20 counts for real current)           Output Frequency         56Hz/60Hz           Test Time         0.3 - 999 sec., continue           Ramp up Time         0.1 - 99.9 sec., off           Waveform         Sine wave           sulation Resistance Test         Output Voltage           Voltage Resolution         2V         2V           Voltage Resolution         2V         2V           Voltage Accuracy         1.5% + 5 V         1.5% + 5 V           IR Range         1MΩ - 50GΩ         1MΩ - 10GΩ           Resistance Resolution         0.1MΩ         0.1MΩ           Resistance Resolution         0.1MΩ         0.1MΩ           Resistance Resolution         0.1MΩ         0.1MΩ           Resistance Resolution         0.1MΩ         0.1MΩ           Resistance Resolution         0.1MΩ         0.1MΩ - 10GΩ : ±10% + 10 counts           Scanner Uni	Mode				
AC : 0.05 - 5kV, DC : 0.05 - 6kV		7,07,207,	7.01/201/.		
Load Regulation   1% + 5V		AC : 0.05 ~ 5kV, DC : 0.05 ~ 6kV			
Voltage Resolution		The state of the s			
1% + 5 counts					
Cutoff Current   AC : 30mA, DC : 10mA					
Current Resolution         AC : 1µA, DC : 0.1µA           Current Accuracy         1% + 5 counts (5% + 2 co cunts for real current)           Output Frequency         50H2/60H2           Test Time         0.3 - 999 sec., continue           Ramp up Time         0.1 - 99.9 sec., off           Waveform         Sine wave           Sine wave           DC : 0.05 - 1kV           Voltage         DC : 0.05 - 1kV           Voltage Resolution         2V         2V           Voltage Resolution         2V         2V           Voltage Resolution         0.1MΩ         1.5% + 5 V           IR Range         1MΩ - 50GΩ         1MΩ - 10GΩ         0.1MΩ           Resistance Resolution         0.1MΩ         0.1MΩ         0.0MΩ           Resistance Resolution         0.1MΩ         0.1MΩ         0.0MΩ         0.0MΩ </th <th></th> <th colspan="3"></th>					
Current Accuracy         1% + 5 counts (5% + 20 counts for real current)           Output Frequency         50Hz/60Hz           Test Time         0.3 - 999 sec., continue           Ramp up Time         0.1 - 99.9 sec., off           Waveform         Sine wave           Insulation Resistance Test         Output Voltage         DC : 0.05 - 1kV         DC : 0.05 - 1kV           Voltage Resolution         2V         2V         2V           Voltage Resolution         2V         2V         2V           IR Range         1MΩ - 50GΩ         1MΩ - 1GΩ         15% + 5V         1.5% + 5V           IR Range         1MΩ - 1GΩ         250GΩ         1MΩ         10GΩ		· · · · · · · · · · · · · · · · · · ·			
Output Frequency         50Hz/60Hz           Test Time         0.3 – 999 sec., conff           Ramp up Time         0.1 − 99.9 sec., off           Waveform         Sine wave           Insulation Resistance Test         DC : 0.05 − 1kV           Output Voltage         DC : 0.05 − 1kV           Voltage Resolution         2V           Voltage Accuracy         1.5% + 5 V           IR Range         1MΩ − 50GΩ           Resistance Resolution         0.1MΩ           Resturn Test Test Test Test Test Test Test Test	Current Accuracy				
Test Time         0.3 – 999 sec., continue           Ramp up Time         0.1 – 99.9 sec., off           Waveform         Sine wave           sulation Resistance Test         Output Voltage         DC : 0.05 – 1kV         DC : 0.05 – 1kV           Voltage Resolution         2V         2V         2V           Voltage Resolution         1.5% + 5V         1.5% + 5V         I.5% + 5V           IR Range         1 MM2 – 10GΩ         1 MM2 – 10GΩ         1 MM2 – 10GΩ           Resistance Resolution         0.1 MΩ         0.1 MΩ         0.1 MΩ         0.1 MΩ           Resistance Accuracy         ≥ 500V : 1MΩ – 1GΩ : ±5% + 10 counts, 1GΩ – 10GΩ : ±10% + 10 counts         10 counts         10 counts         10 counts         10 counts         10 counts         4 ports, ±10% + 10 counts					
Sine wave	Test Time				
DC : 0.05 ~ 1kV   DC : 0.05 ~ 1kV	Ramp up Time				
Output Voltage         DC : 0.05 ~ 1kV         DC : 0.05 ~ 1kV           Voltage Resolution         2V         2V           Voltage Accuracy         1.5% + 5 V         1.5% + 5 V           IR Range         1MΩ ~ 50GΩ         1MΩ ~ 10GΩ           Resistance Resolution         0.1MΩ         0.1MΩ           Resistance Accuracy         ≥ 500V : 1MΩ ~ 1GΩ : ±5% + 10 counts, 1GΩ ~ 10GΩ : ±10% + 10 counts           Scanner Unit          8 ports, ±phase         4 ports, ±phase           vc Detection         Programmable setting           Setting Mode         Programmable setting           Detection Current         AC : 1mA ~ 15mA, DC : 1mA ~ 10mA           Minimum Pulse Width         10µs approx.           Secure Protection Function            Fast DC discharge         0.2 sec.           Ground Fault Interrupt (GFI)         0.5mA ± 0.25mA AC, Close           Panel Operation Lock         12 ± 0.22, Off           Continuity Check         12 ± 0.22, Off           SO/NG Judgment Window         Indication, Alarm           Indication, Alarm         GO: Short sound, Green LED; NG: Long sound, RED LED           Data Hold         Least tests data memories           Memory Storage         99 steps or 99 groups for total 500 memory locations      <	Waveform	· · · · · · · · · · · · · · · · · · ·			
Voltage Resolution   2V   2V   Voltage Accuracy   1.5% + 5 V   1.5% + 10 Counts   10GΩ	Insulation Resistance Test				
Voltage Accuracy	Output Voltage	DC: 0.05 ~ 1kV	DC: 0.05 ~ 1kV		
RR Range   1MΩ ~ 50GΩ   1MΩ ~ 10GΩ	Voltage Resolution	2V	2V		
Resistance Resolution         0.1MΩ         0.1MΩ : ±5% + 10 counts, 1GΩ : ±10% + 10 counts           Resistance Accuracy         ≥ 500V : 1MΩ ~ 1GΩ : ±5% + 10 counts, ≤ 500V : 0.1MΩ ~ 1GΩ : ±10% + 10 counts           Scanner Unit          8 ports, ±phase         4 ports, ±phase           Scanner Unit          8 ports, ±phase         4 ports, ±phase           Accidence         Programmable setting           Detection         Programmable setting           Minimum Pulse Width         10µs approx.           Secure Protection Function         4C : 1mA ~ 15mA, DC : 1mA ~ 10mA           Fast DC discharge         0.4ms after NG happen           Fast DC discharge         0.2 sec.           Ground Fault Interrupt (GFI)         0.5mA ± 0.25mA AC, Close           Panel Operation Lock         Present password           Continuity Check         1Ω ± 0.2Ω, Off           30/NG Judgment Window         10mIdication, Alarm         GC: Short sound, Green LED; NG: Long sound, RED LED           Data Hold         Least tests data memories           Memory Storage         99 steps or 99 groups for total 500 memory locations           Remote Connector         Real Panel 9 pin D-type connector         Input: Start, Stop, Interlock (at 11 pin terminal block only); Output: Under test, Pass, Fail           General         Operation Env	Voltage Accuracy	1.5% + 5 V	1.5% + 5V		
\$ 500V : 1MΩ ~1GΩ : ±5% + 10 counts, 1GΩ ~10GΩ : ±10% + 10 counts     10GΩ ~50GΩ : ±15% + 10 counts, ≤ 500V : 0.1MΩ ~1GΩ : ±10% + 10 counts     10GΩ ~50GΩ : ±15% + 10 counts, ≤ 500V : 0.1MΩ ~1GΩ : ±10% + 10 counts     10GΩ ~50GΩ : ±15% + 10 counts, ≤ 500V : 0.1MΩ ~1GΩ : ±10% + 10 counts     10GΩ ~50GΩ : ±15% + 10 counts, ≤ 500V : 0.1MΩ ~1GΩ : ±10% + 10 counts     10GΩ ~50GΩ : ±15% + 10 counts, ≤ 500V : 0.1MΩ ~1GΩ : ±10% + 10 counts     10GΩ ~50GΩ : ±15% + 10 counts, ≤ 500V : 0.1MΩ ~1GΩ : ±10% + 10 counts     10GΩ ~50GΩ : ±15% + 10 counts, ≤ 500V : 0.1MΩ ~1GΩ : ±10% + 10 counts     10GΩ ~50GΩ : ±15% + 10 counts, ≤ 500V : 0.1MΩ ~1GΩ : ±10% + 10 counts     10GΩ ~50GΩ : ±15% + 10 counts, ≤ 500V : 0.1MΩ ~1GΩ : ±10% + 10 counts     10GΩ ~50GΩ : ±15% + 10 counts, ≤ 500V : 10 counts     10GΩ ~1GΩ : ±10% + 10 counts     10GΩ ~1GΩ ·10 counts     10GΩ ~1GΩ ·10 counts     10GΩ ~1GΩ ·10 counts     10GΩ ~1GΩ ·10 counts     10GΩ ~1GΩ ~1GΩ ~1GΩ ·10 counts     10GΩ ~1	IR Range	1MΩ ~ 50GΩ	1MΩ ~ 10GΩ		
Scanner Unit	Resistance Resolution	0.1ΜΩ	0.1ΜΩ		
Scanner Unit	Resistance Accuracy	≥ 500V : 1MΩ ~	≥ 500V : $1M\Omega \sim 1G\Omega$ : $\pm 5\% + 10$ counts, $1G\Omega \sim 10G\Omega$ : $\pm 10\% + 10$ counts		
Setting Mode Programmable setting Detection Current AC: 1mA ~ 15mA, DC: 1mA ~ 10mA Minimum Pulse Width 10µs approx.  Secure Protection Function Fast Output Cut-off Fast Output Cut-off Fast DC discharge 0.2 sec. Ground Fault Interrupt (GFI) Panel Operation Lock Present password Continuity Check 1Ω ± 0.2Ω, Off  SO/NG Judgment Window Indication, Alarm GO: Short sound, Green LED; NG: Long sound, RED LED Data Hold Least tests data memories Memory Storage Panel 9 pin D-type connector Real Panel 9 pin D-type connector Input: Start, Stop, Interlock (at 11 pin terminal block only); Output: Under test, Pass, Fail Seneral Operation Environment Power Requirements 100V/120V/ 220V (AC ±10%), 240V (AC ±5%~ -10%), 50/60Hz Weight 15 kg approx. 15 kg approx. 15 kg approx.		$10GΩ \sim 50GΩ$ : ±15% + 10 counts, ≤ 500V : 0.1MΩ ~1GΩ : ±10% +10 counts			
Setting Mode     Programmable setting       Detection Current     AC : 1mA ~ 15mA, DC : 1mA ~ 10mA       Minimum Pulse Width     10µs approx.       Secure Protection Function     5eacure Protection Function       Fast Output Cut-off     0.4ms after NG happen       Fast DC discharge     0.2 sec.       Ground Fault Interrupt (GFI)     0.5mA ± 0.25mA AC, Close       Panel Operation Lock     Present password       Continuity Check     1Ω ± 0.2Ω, Off       3O/NG Judgment Window     Indication, Alarm       Data Hold     Least tests data memories       Memory Storage     99 steps or 99 groups for total 500 memory locations       Remote Connector     Real Panel 9 pin D-type connector       Real Panel 9 pin D-type connector     Input : Start, Stop, Interlock (at 11 pin terminal block only); Output : Under test, Pass, Fail       General     Operation Environment     Temperature : 0 ~ 40 °C, Humidity : ≤ 80% RH       Power Consumption     No load : < 100W, With rated load : < 500W max.       Power Requirements     100V/120V/ 220V (AC ±10%), 240V (AC +5%~ -10%), 50/60Hz       Weight     15 kg approx.     15 kg approx.	Scanner Unit		8 ports, ±phase	4 ports, ±phase	
Detection Current       AC : 1mA ~ 15mA, DC : 1mA ~ 10mA         Minimum Pulse Width       10μs approx.         Secure Protection Function       0.4ms after NG happen         Fast Output Cut-off       0.4ms after NG happen         Fast DC discharge       0.2 sec.         Ground Fault Interrupt (GFI)       0.5mA ± 0.25mA AC, Close         Panel Operation Lock       Present password         Continuity Check       1Ω ± 0.2Ω, Off         3O/NG Judgment Window       GO: Short sound, Green LED; NG: Long sound, RED LED         Data Hold       Least tests data memories         Memory Storage       99 steps or 99 groups for total 500 memory locations         Remote Connector       Real Panel 9 pin D-type connector       Input : Start, Stop, Interlock (at 11 pin terminal block only); Output : Under test, Pass, Fail         Beneral       Operation Environment       Temperature : 0 ~ 40 °C, Humidity : ≤ 80% RH         Power Consumption       No load : < 100W, With rated load : < 500W max.	Arc Detection				
Minimum Pulse Width       10μs approx.         Secure Protection Function       0.4ms after NG happen         Fast Output Cut-off       0.2 sec.         Ground Fault Interrupt (GFI)       0.5mA ± 0.25mA AC, Close         Panel Operation Lock       Present password         Continuity Check       1Ω ± 0.2Ω, Off         3O/NG Judgment Window       Indication, Alarm         Indication, Alarm       GO: Short sound, Green LED; NG: Long sound, RED LED         Data Hold       Least tests data memories         Memory Storage       99 steps or 99 groups for total 500 memory locations         Remote Connector       Input: Start, Stop, Interlock (at 11 pin terminal block only); Output: Under test, Pass, Fail         General       Operation Environment       Temperature: 0 ~ 40 °C, Humidity: ≤ 80% RH         Power Consumption       No load: < 100W, With rated load: < 500W max.         Power Requirements       100V/120V/ 220V (AC ±10%), 240V (AC +5%~ -10%), 50/60Hz         Weight       14 kg approx.       15 kg approx.	Setting Mode	Programmable setting			
Fast Output Cut-off Fast Output Cut-off Fast DC discharge  Ground Fault Interrupt (GFI)  Panel Operation Lock Present password Continuity Check  GO/NG Judgment Window Indication, Alarm GO: Short sound, Green LED; NG: Long sound, RED LED Data Hold Least tests data memories  Memory Storage 99 steps or 99 groups for total 500 memory locations  Remote Connector Real Panel 9 pin D-type connector  Beneral Operation Environment Temperature: 0 ~ 40 °C, Humidity: ≤ 80% RH Power Consumption No load: < 100W, With rated load: < 500W max.  Power Requirements 10 0V/120V/ 220V (AC ±10%), 240V (AC +5%~ -10%), 50/60Hz Weight 15 kg approx. 15 kg approx. 15 kg approx.	Detection Current	AC : 1mA ~ 15mA, DC : 1mA ~ 10mA			
Fast Output Cut-off  Fast DC discharge  0.2 sec.  Ground Fault Interrupt (GFI)  0.5mA ± 0.25mA AC, Close  Panel Operation Lock  Present password  Continuity Check  1Ω ± 0.2Ω, Off  30/NG Judgment Window  Indication, Alarm  GO: Short sound, Green LED; NG: Long sound, RED LED  Data Hold  Least tests data memories  Memory Storage  99 steps or 99 groups for total 500 memory locations  Remote Connector  Real Panel 9 pin D-type connector  Input: Start, Stop, Interlock (at 11 pin terminal block only); Output: Under test, Pass, Fail  Operation Environment  Temperature: 0 ~ 40 °C, Humidity: ≤ 80% RH  Power Consumption  No load: < 100W, With rated load: < 500W max.  Power Requirements  100V/120V/ 220V (AC ±10%), 240V (AC +5%~ -10%), 50/60Hz  Weight  15 kg approx.  15 kg approx.	Minimum Pulse Width	10µs арргох.			
Fast DC discharge 0.2 sec.  Ground Fault Interrupt (GFI) 0.5mA ± 0.25mA AC, Close  Panel Operation Lock Present password  Continuity Check 1Ω ± 0.2Ω, Off  GO/NG Judgment Window  Indication, Alarm GO: Short sound, Green LED; NG: Long sound, RED LED  Data Hold Least tests data memories  Memory Storage 99 steps or 99 groups for total 500 memory locations  Remote Connector  Real Panel 9 pin D-type connector Input: Start, Stop, Interlock (at 11 pin terminal block only); Output: Under test, Pass, Fail  General  Operation Environment Temperature: 0 ~ 40 °C, Humidity: ≤ 80% RH  Power Consumption No load: < 100W, With rated load: < 500W max.  Power Requirements 15 kg approx. 15 kg approx. 15 kg approx.	Secure Protection Function				
Ground Fault Interrupt (GFI) $0.5 \text{mA} \pm 0.25 \text{mA}$ AC, Close         Panel Operation Lock       Present password         Continuity Check $1Ω \pm 0.2Ω$ , Off         3O/NG Judgment Window       Indication, Alarm         Indication, Alarm       GO: Short sound, Green LED; NG: Long sound, RED LED         Data Hold       Least tests data memories         Memory Storage       99 steps or 99 groups for total 500 memory locations         Remote Connector       Input: Start, Stop, Interlock (at 11 pin terminal block only); Output: Under test, Pass, Fail         General       Operation Environment       Temperature: 0 ~ 40 °C, Humidity: ≤ 80% RH         Power Consumption       No load: < 100W, With rated load: < 500W max.         Power Requirements       100V/120V/ 220V (AC ±10%), 240V (AC +5%~ -10%), 50/60Hz         Weight       15 kg approx.       15 kg approx.	Fast Output Cut-off	• •			
Panel Operation Lock       Present password         Continuity Check $1Ω ± 0.2Ω$ , Off         SO/NG Judgment Window         Indication, Alarm       GO: Short sound, Green LED; NG: Long sound, RED LED         Data Hold       Least tests data memories         Memory Storage       99 steps or 99 groups for total 500 memory locations         Real Panel 9 pin D-type connector       Input : Start, Stop, Interlock (at 11 pin terminal block only); Output : Under test, Pass, Fail         Seneral       Operation Environment       Temperature : 0 ~ 40 °C, Humidity : ≤ 80% RH         Power Consumption       No load : < 100W, With rated load : < 500W max.	Fast DC discharge				
Continuity Check $1Ω ± 0.2Ω$ , Off         GO/NG Judgment Window       Indication, Alarm       GO: Short sound, Green LED; NG: Long sound, RED LED         Data Hold       Least tests data memories         Memory Storage       99 steps or 99 groups for total 500 memory locations         Real Panel 9 pin D-type connector       Input: Start, Stop, Interlock (at 11 pin terminal block only); Output: Under test, Pass, Fail         Reneral       Operation Environment       Temperature: $0 \sim 40$ °C, Humidity: $≤ 80\%$ RH         Power Consumption       No load: $< 100W$ , With rated load: $< 500W$ max.         Power Requirements $100V/120V/220V$ (AC ±10%), 240V (AC +5%~ -10%), 50/60Hz         Weight $14 \text{ kg approx}$ $15 \text{ kg approx}$ $15 \text{ kg approx}$	Ground Fault Interrupt (GFI)	,			
All Power Consumption  CO: Short sound, Green LED; NG: Long sound, RED LED  Data Hold  Least tests data memories  Memory Storage  99 steps or 99 groups for total 500 memory locations  linput: Start, Stop, Interlock (at 11 pin terminal block only); Output: Under test, Pass, Fail  Coneral  Operation Environment  Temperature: 0 ~ 40 °C, Humidity: ≤ 80% RH  Power Consumption  No load: < 100W, With rated load: < 500W max.  Power Requirements  100V/120V/ 220V (AC ±10%), 240V (AC +5%~ -10%), 50/60Hz  Weight  15 kg approx.  15 kg approx.	Panel Operation Lock				
Indication, Alarm     GO: Short sound, Green LED; NG: Long sound, RED LED       Data Hold     Least tests data memories       Memory Storage     99 steps or 99 groups for total 500 memory locations       Real Panel 9 pin D-type connector     Input: Start, Stop, Interlock (at 11 pin terminal block only); Output: Under test, Pass, Fail       General     Operation Environment     Temperature: 0 ~ 40 °C, Humidity: ≤ 80% RH       Power Consumption     No load: < 100W, With rated load: < 500W max.			$1\Omega \pm 0.2\Omega$ , Off		
Data Hold         Least tests data memories           Memory Storage         99 steps or 99 groups for total 500 memory locations           Remote Connector         Input : Start, Stop, Interlock (at 11 pin terminal block only); Output : Under test, Pass, Fail           General         Temperature : 0 ~ 40 °C, Humidity : ≤ 80% RH           Power Consumption         No load : < 100W, With rated load : < 500W max.	GO/NG Judgment Window				
Memory Storage         99 steps or 99 groups for total 500 memory locations           Remote Connector         Real Panel 9 pin D-type connector         Input : Start, Stop, Interlock (at 11 pin terminal block only); Output : Under test, Pass, Fail           General           Operation Environment         Temperature : 0 ~ 40 °C, Humidity : ≤ 80% RH           Power Consumption         No load : < 100W, With rated load : < 500W max.           Power Requirements         100V/120V/ 220V (AC ±10%), 240V (AC +5%~ -10%), 50/60Hz           Weight         15 kg approx.         15 kg approx.					
Remote Connector         Input : Start, Stop, Interlock (at 11 pin terminal block only); Output : Under test, Pass, Fail           Beneral         Temperature : 0 ~ 40 °C, Humidity : ≤ 80% RH           Power Consumption         No load : < 100W, With rated load : < 500W max.					
Real Panel 9 pin D-type connector         Input : Start, Stop, Interlock (at 11 pin terminal block only);         Output : Under test, Pass, Fail           General         Temperature : 0 ~ 40 °C, Humidity : ≤ 80% RH           Power Consumption         No load : < 100W, With rated load : < 500W max.		99 steps or 99 groups for total 500 memory locations			
General         Temperature : 0 ~ 40 °C, Humidity : ≤ 80% RH           Power Consumption         No load : < 100W, With rated load : < 500W max.					
Operation Environment         Temperature : 0 ~ 40 °C, Hurnidity : ≤ 80% RH           Power Consumption         No load : < 100W, With rated load : < 500W max.           Power Requirements         100V/120V/ 220V (AC ±10%), 240V (AC +5%~ -10%), 50/60Hz           Weight         14 kg approx.         15 kg approx.         15 kg approx.		Input : Start, Stop, Interloc	ck (at 11 pin terminal block only); Outpu	ut : Under test, Pass, Fail	
Power Consumption         No load : < 100W, With rated load : < 500W max.	General				
Power Requirements         100V/120V/ 220V (AC ±10%), 240V (AC +5%~ -10%), 50/60Hz           Weight         14 kg approx.         15 kg approx.         15 kg approx.					
Weight 14 kg approx. 15 kg approx. 15 kg approx.					
			77	7	
Dimension(W X H X D) 320 x 105 x 400mm		14 kg approx.	0 11	15 kg approx.	
,	Dimension(W X H X D)		320 x 105 x 400mm		

All specifications are subject to change without notice.

### **Panel Description**



1. LINE Switch

3. Stop Button

4. Start Button

2. Window Display

11. RTN/LOW

12. 8 channels HV Output

5. Function Keys (F1~F4) (19053 only)

6. Calibration Switch 13. Remote I/O

7. Pass Indicator

8. Fail Indicator

9. Test Indicator

10. HV Output

14. LINE Voltage Selector

15. Power Cord Receptacle

16. RTN/LOW

17. GPIB/Printer Interface (Option)

18. Scan Interface (Option)

19. Fan

20. Remote Interface

21. RS-232 Interface

22. Continuity Test O/P

23. Update Switch

### **Application**

- Production test of appliances, instruments and information technology equipment in accordance with UL, IEC, TUV and other standards such as EN 60335, EN 60950, EN 61010, CSA C22.2 No.1010.1, UL 3111 and UL 1950
- Transformer electrical safety test
- Electric motor safety test
- Various electronic components tests

### **Order Information**

19052 Hipot Tester (AC/DC/IR)

19053 Hipot Tester (AC/DC/IR/8CH SCAN) 19054 Hipot Tester (AC/DC/IR/ 4CH SCAN) A190501 Manual Operation TR. Scan Box A190512 Auto Control TR. Scan Box Auto Control Dual TR. Scan Box A190513

A190508 **GPIB** Interface A190510 Printer Interface A190702 40kV HV Test Probe

Developed and Manufactured by:

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