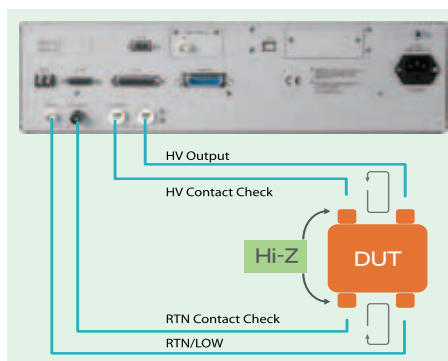


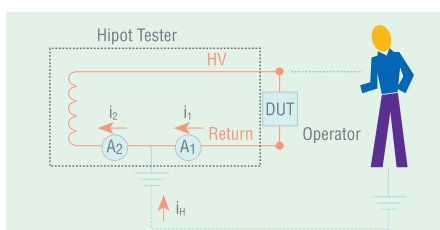


## HIPOT ANALYZER MODEL 19056/19057 SERIES

Chroma 19056/19057 Hipot Analyzer is an equipment specially designed for testing and analyzing ultra-high withstand voltage. The series of models include 10kVac/12kVdc/20kVdc with maximum AC20mA/DC10mA output can perform AC/DC withstand voltage and insulation resistance tests with contact check during production line test. In addition to the patented OSC (Open Short Check), High Voltage Contact Check is added to test the components with high insulation capability when high voltage outputs to improve the testing reliability and efficiency.



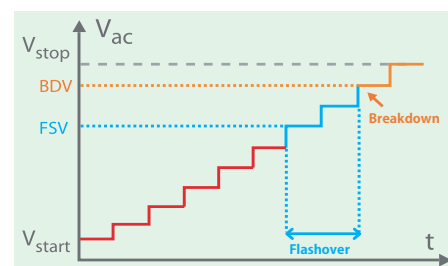
Chroma 19056/19057 with GFI (Ground Fault Interrupt) is designed to protect operator's safety when abnormal ground current ( $A_2 - A_1$ ) occurs.



The Hipot Analyzer provides high withstand voltage test and analysis for optical couplers, HV relays, HV switches and PV modules, which have better insulation capability.

Charge and discharge are required for capacitive components when doing DC withstand voltage test. The Hipot Analyzers have fast charge function that can increase the production test efficiency.

The Hipot Analyzer of entire series has Flashover (ARC) detection function. Through the start voltage, end voltage, no. of steps and time, it can perform discharge level analysis. Phase judgment is provided in DLA (Discharge Level Analysis) mode to set inspection for Flashover (ARC) and Breakdown test (high limit). When a defect appears in the test, the 19056/19057 will show the withstanding voltage to indicate the Flashover Start Voltage (FSV) or BreakDown Voltage (BDV) respectively. In addition, External Oscilloscopes can be mounted to check the waveform at the same time during analysis. The R&D engineers can perform product analysis and study utilizing the test results to improve the weakness of insulation components.



### Hipot Analyzer

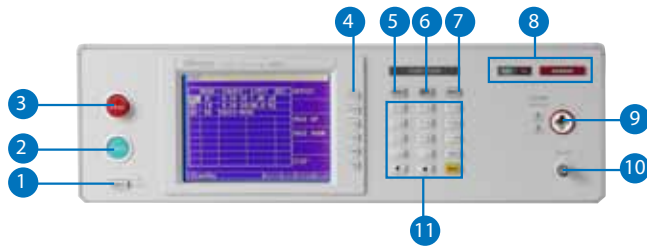
#### MODEL 19056 19057 Series

##### Key Features :

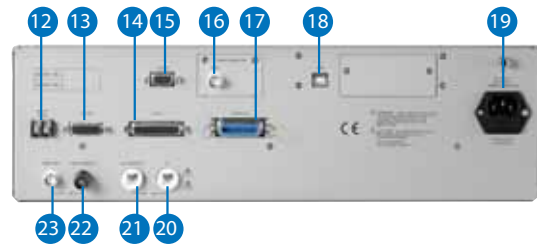
- 10kV AC & 20kV DC withstand voltage test
- 0.1M $\Omega$ ~50G $\Omega$  insulation impedance test
- BDV (BreakDown Voltage test)
- HVCC (High Voltage Contact Check)
- HFCC (High Frequency Contact Check)
- OSC (Open Short Check)
- GFI (Ground Fault Interrupt) human protection circuit
- Fast charge/discharge function
- Programmable output & test limit
- Standard RS232 interface
- Optional GPIB&HANDLER interface
- Key lock function
- CE Mark




## PANEL DESCRIPTION



- 1. Power Switch
- 2. Start Key
- 3. Stop Key
- 4. Function Key
- 5. Menu Key
- 6. Main Index Key
- 7. Local Key
- 8. LED Display
- 9. HV Output
- 10. RTN/LOW
- 11. Entry Keys



- 12. Interlock
- 13. OPTION
- 14. SCAN
- 15. RS232 Interface
- 16. ARC Signal Output
- 17. HANDLER Interface
- 18. USB Interface
- 19. Power Inlet
- 20. HV
- 21. HV CONTACT
- 22. LOW/CONTACT
- 23. RTN/LOW

## SPECIFICATIONS

| Model  | 19056   | 19057   | 19057-20   |
|--|---|---|--|
| Mode   | ACV   | DCV / IR  | DCV / IR   |
| <b>Withstanding Voltage Test</b>             |   |   |  |
| Output Voltage                               | AC: 0.1~10kV  | DC: 0.1~12kV  | DC : 0.1 ~ 20kV  |
| Load Regulation                              | ± (1% of output + 10V), Rated load  |   |  |
| Voltage Accuracy                             | 1% of reading + 0.1% of full scale  |   | 1.5% of reading + 0.1% of full scale   |
| Voltage Regulation                           | ± (1% of output + 10V), Rated load  |   |  |
| Cutoff Current                               | 0.001~20mA  | 0.0001~10mA   | 0.0001~5 mA  |
| Current Accuracy                             | 0.100mA~2.999mA :<br>± (1% of reading + 0.3% of full range)<br>3.00mA~20.00mA :<br>± (1.5% of reading + 0.3% of full range) | ± (1% of reading + 0.5% of full range)                                  |  |
| Current Resolution                           | AC : 1 μA   | DC : 0.1 μA   |  |
| Output Frequency                             | 50Hz / 60Hz   | -   | -  |
| Test/Ramp/Fall/Dwell Time                    | 0.3 ~ 999 sec., continue / 0.1 ~ 999 sec., off / 0.1 ~ 999 sec., off / 0.1 ~ 999 sec., off                                  |   |  |
| Waveform                                     | Sine wave   | -   | -  |
| <b>Insulation Resistance Test</b>            |   |   |  |
| Output Voltage                               | -   | DC : 0.1 ~ 5kV  |  |
| Voltage Resolution                           | -   | 2V  |  |
| Voltage Accuracy                             | -   | 1% of setting + 0.5% of full scale                                      | 1.5% of setting + 0.5% of full scale   |
| IR Range                                     | -   | 0.1MΩ ~ 50GΩ  |  |
| Resistance Resolution                        | -   | 0.1MΩ   |  |
| Resistance Accuracy                          | ≥ 0.5kV   | -   | 1MΩ ~ 1GΩ : ± 3% of reading + 0.5% of full range<br>1GΩ ~ 10GΩ : ± 5% of reading + 1% of full range<br>10GΩ ~ 50GΩ : ± 10% of reading + 1% of full range |
|  | <0.5kV  | -   | 1MΩ ~ 1GΩ : ± 5% of reading + (0.5*500/Vs)% of full scale  |
| <b>Flashover Detection</b>                   |   |   |  |
| Setting Mode                                 | Programmable setting  |   |  |
| Detection Current                            | AC : 20mA   | DC : 10mA   | DC : 10mA  |
| <b>Contact Check Function</b>                |   |   |  |
| Contact Check                                | OSC (open/short check)<br>HVCC(High Voltage contact check)<br>HFCC (High Frequency Contact Check)                           | HVCC(High Voltage contact check)<br>HFCC (High Frequency Contact Check) | HVCC(High Voltage contact check)<br>HFCC (High Frequency Contact Check)  |
| <b>Electrical Hazard Protection Function</b> |   |   |  |
| Ground Fault Interrupt                       | 0.5mA ± 0.25mA AC, ON/OFF   | -   | -  |
| Key Lock                                     | Yes (password control)  |   |  |
| Interlock                                    | YES   |   |  |
| <b>GO/NG Judgment Window</b>                 |   |   |  |
| Indication, Alarm                            | GO : Short sound, Green LED; NG : Long sound, Red LED   |   |  |
| Memory Storage                               | 100 sets ,max. 50 steps per set   |   |  |
| Interface                                    | Standard-RS232, Handler interface ,USB , SCAN Optional - GPIB interface   |   |  |
| <b>General</b>                               |   |   |  |
| Operation Environment                        | Temperature: 0°C ~ 45°C ; Humidity: 15% to 95% R.H@ ≤ 40°C  |   |  |
| Power Consumption                            | 600VA   |   |  |
| Power Requirements                           | 100~240Vac, 47~66Hz   |   |  |
| Dimension (HxWxD)                            | 130x430x500 mm/5.12x16.93x19.69 inch  |   |  |
| Weight                                       | 28kg / 61.7 lbs   |   |  |

All specifications are subject to change without notice

## ORDERING INFORMATION

**19056** : Hipot Analyzer AC10kV  
**19057** : Hipot Analyzer DC12kV/IR  
**19057-20** : Hipot Analyzer DC20kV/IR

**A190508** : GPIB Interface  
**A190702** : 40kV High Voltage Testing Rod  
**A190708** : ARC (Flashover) Verification Fixture

Developed and Manufactured by :

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