

## Hipot Analyzer

### MODEL 19056 19057 Series

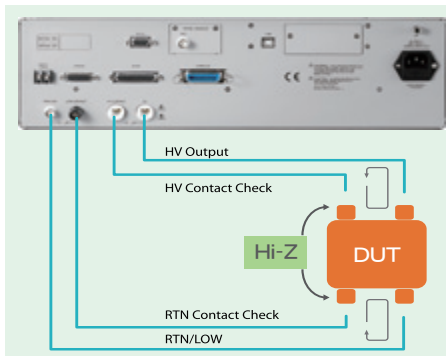
#### Key Features :

- 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

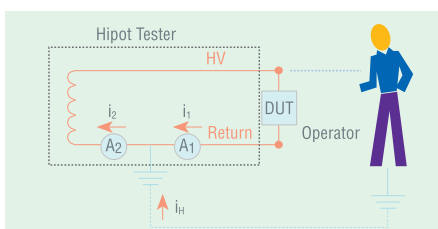


## HIPOT ANALYZER MODEL 19056/19057 SERIES

Chroma 19056/19057 Hipot Analyzer is an equipment specially designed for testing and analyzing ultra-high withstand voltage. The series of models include 10kV<sub>ac</sub>/12kV<sub>dc</sub>/20kV<sub>dc</sub> 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.



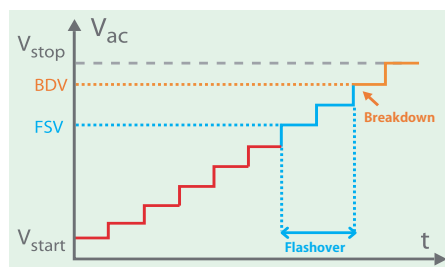
Chroma 19056/19057 with GFI (Ground Fault Interrupt) is designed to protect operator's safety when abnormal ground current ( $A_2$ - $A_1$ ) occurs.



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.

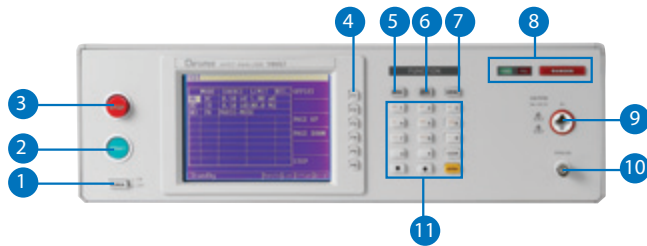
Charge and discharge are required for capacitive components when doing DC withstand voltage test. The Hipot Analyzers have fast charge function that can increase the production test efficiency.

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.

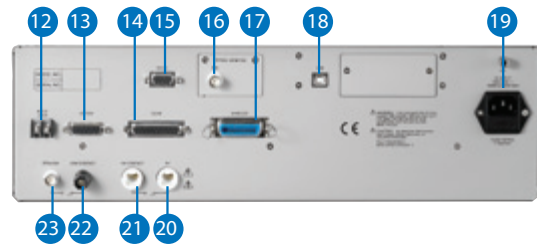


# Chroma

## 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 : ± (1% of reading + 0.3% of full range) 3.00mA~20.00mA : ± (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 1GΩ ~ 10GΩ : ± 5% of reading + 1% of full range 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) HVCC(High Voltage contact check) HFCC (High Frequency Contact Check)	HVCC(High Voltage contact check) HFCC (High Frequency Contact Check)	HVCC(High Voltage contact check) 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 :

**CHROMA ATE INC.**  
 致茂電子股份有限公司  
**HEADQUARTERS**  
 66 Hwaya 1st Rd., Kueishan  
 Hwaya Technology Park,  
 Taoyuan County 33383,  
 Taiwan  
 Tel: +886-3-327-9999  
 Fax: +886-3-327-8898  
 http://www.chromaate.com  
 E-mail: info@chromaate.com

**CHINA**  
**CHROMA ELECTRONICS**  
**(SHENZHEN) CO., LTD.**  
 8F, No.4, Nanyou Tian An  
 Industrial Estate, Shenzhen,  
 China PC: 518052  
 Tel: +86-755-2664-4598  
 Fax: +86-755-2641-9620

**JAPAN**  
**CHROMA JAPAN CORP.**  
 472 Nippa-cho, Kouhoku-ku,  
 Yokohama-shi, Kanagawa,  
 223-0057 Japan  
 Tel: +81-45-542-1118  
 Fax: +81-45-542-1080  
 http://www.chroma.co.jp  
 E-mail: info@chromaate.com

**U.S.A.**  
**CHROMA SYSTEMS**  
**SOLUTIONS, INC.**  
 19772 Pauling,  
 Foothill Ranch, CA 92610  
 Tel: +1-949-600-6400  
 Fax: +1-949-600-6401  
 http://www.chromausa.com  
 E-mail: sales@chromausa.com

**EUROPE**  
**CHROMA ATE EUROPE B.V.**  
 Morsestraat 32, 6716 AH Ede,  
 The Netherlands  
 Tel: +31-318-648282  
 Fax: +31-318-648288  
 http://www.chroma.eu.com  
 E-mail: sales@chroma.eu.com

Worldwide Distribution and  
 Service Network