



Chroma 11802 Series Programmable High Frequency AC Tester is a digital controlled high frequency AC source platform, can be combined with high frequency voltage/current step-up module to provide high voltage/high current. Chroma 11802 Series output test frequency is 20kHz~200kHz, which cover application frequency range for various SMPS, LCD inverter and etc.

Chroma 11802 Series provides digital functions, like programmable sine-wave output voltage controller to simulate the operation condition for DUT, and cycle count mode or timer mode for load life test, etc. Chroma 11802 Series uses tracking DC source inside for output amplifier to reduce power consumption and lower temperature rising. It reduces electricity cost and improves stability for long time testing. It is the best choice to perform quality verification for various electronic components which used under high frequency, like LCD Inverter and module, high voltage capacitors, primary of SMPS main power, CCFI, HCFI, and EEEFI etc.

Chroma 11890 is the best tester for production line of HF HV electronic components withstanding voltage test, like LCD inverter transformer, ceramic capacitor, cable, PCB, automatic motor corona discharge inspection and medical equipment high frequency leakage current safety inspection.

Chroma 11891 is a tester with only function HF HV

Load Life Test (CV and CC mode). It is suitable for passive component load life test.

#### ORDERING INFORMATION

**11802** : Programmable HF AC Tester 500VA

**11803** : Programmable HF AC Tester 800VA

**11805** : Programmable HF AC Tester 1000VA

**11890** : HF Hipot Tester 500VA

**11891** : HF HV Load Life Tester 500VA

#### H.F. Current Step-up Module

- **A118011** : 10V/50A max.

- **A118015** : 33V/30A max.

- **A118019** : 16V/30A max.

- **A118037** : 30V/25A max.

#### H.F. Voltage Step-up Module

- **A118014** : 2.5kV/200mA max.

- **A118016** : 250V/2A max.

- **A118017** : 8kV/60mA max.

- **A118018** : 1kV/1A max.

- **A118031** : 5kV/100mA max. (with shielding)

- **A118032** : 1kV/500mA max.

- **A118034** : 2.5kV/400mA max.

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#### Programmable HF AC Tester Model 11802/11803/11805

#### HF Hipot Tester

#### Model 11890

#### HF HV Load Life Tester

#### Model 11891

#### KEY FEATURES

- HF HV Load Life Test (CV and CC mode)
- HF Withstand Voltage Test (CV and CC mode)
- HF Breakdown Voltage Test (CV mode)
- Test frequency: 20kHz ~ 1MHz
- Wide output voltage and current range while combine with different module (Module is customized and based on the tester's power)
- Output voltage and current monitor
- Programmable output voltage waveform control
- Cycle count mode or time count mode for load life test timer
- Lower power consumption and lower temperature rising design
- Large LCD display (320 x 240 dot-matrix)
- Built-in digital timer

#### APPLICATION LIST

Model	Primary Function	Option	Application Description
11802	HF, HV, CV	A118013 HF HV 5kV/100mA max A118014 HF HV 2.5kV/200mA max A118017 HF HV 8kV/100kHz max A118031 HF HV 5kV/100mA max + shielding	LCD inverter transformer (ceramic capacitor, PCB) load life / withstanding voltage / breakdown voltage test EEFI, backlight load life / lamp current test SMPS main transformer and active PFC choke load life test and electrical analysis Medical equipment high frequency leakage current safety inspection Automobile motor corona discharge inspection, analysis and production line
	HF, HV, CV	Step-up current test module + specified resonant inductor/ capacitor	Ballast capacitor / inductor ignition voltage load life test
	HF, HI, CC, Bias voltage	Ripple Current Test Module Chroma 11200 CLC / IR Meter (for DC voltage source with discharge function)	Snubber capacitor load life test
	HF, CV, Bias current Temperature meter	Step-up current test module + AC/DC coupling test fixture Chroma DC power supply (for DC bias current) Chroma 12061 Digital Multimeter (for temperature measurement)	DC-DC converter SMD power choke temperature rising test (DC Bias current with AC ripple voltage) and electrical analysis
	HF, HV, CV (or + DC source)	HF HV test module Option Chroma DC source	Function as HF HV AC +DC power source for FFI and SED device analysis
11803	HF, CV, Bias current Temperature meter	Step-up current test module + AC/DC coupling test fixture Chroma DC power supply (for DC bias current) Chroma 12061 Digital Multimeter (for temperature measurement)	DC-DC converter SMD power choke temperature rising test (DC Bias current with AC ripple voltage) and electrical analysis
11890	HF, HV, CV	A118013 HF HV 5kV/100mA max A118014 HF HV 2.5kV/200mA max A118031 HF HV 5kV/100mA max + shielding	LCD inverter transformer( ceramic capacitor, cable, PCB) withstanding voltage test for production line
			Medical equipment high frequency leakage current safety inspection
			Automobile motor corona discharge inspection for production line
11805	HF, HI, Bias voltage	A118015 HF, HI 33V/30A max.	Snubber capacitor load life test
	HF, HV	A118018 HF, HV 1kV/1A max.	High voltage capacitor load life test
11891	HF, HV, CV	A118013 HF HV 5kV/100mA max A118014 HF HV 2.5kV/200mA max	Passive Component (inverter transformer, ceramic capacitor, cable, PCB etc.)
			High Frequency and High Voltage Load Life Test

SPECIFICATIONS		11802	11890	11891	11805	11803		
<b>AC Output</b>								
Frequency	Range (rms)	20kHz~200kHz, step 1kHz		10kHz~200kHz, step 1kHz	20kHz~1MHz, step 1kHz			
Frequency accuracy	accuracy	± 0.02%						
Output Voltage	Range (rms)	167V maximum, step 1 V		1~143V, step 1 V				
	accuracy	± (5% of setting + 0.5V)						
	reading	± (4% of reading + 0.5V)						
Output Current	Range (rms)	0.01A ~ 3.00A,		0.05A ~ 6.00A,	5.6A maximum			
	accuracy	± (5% of setting + 0.5A)						
	reading	± (4% of reading + 0.5A)						
Maximum Output Power		500VA		1kVA	800VA			
Output mode	HF HV Load Life Test (CV)	●		●	●	●		
	HF HV Load Life Test (CC)	●		●	●	●		
	HF WV Test (CV)	●	●		●	●		
	HF WV Test (CC)	●	●		●	●		
	HF Breakdown Voltage Test	●			●	●		
<b>Control Function</b>								
Timer	Load Life Test	1 min ~ 10000 hour, 30min error per year						
	WV Test	0.1 sec ~ 999.9 sec						
<b>General</b>								
Operation Environment		Temperature : 10°C~40°C, Humidity : < 90% RH						
Power Consumption		2700 VA max.		3000 VA max.	2700 VA max.			
Power Requirement		180 ~ 264Vac, 47 ~ 63Hz						
Dimension (H x W x D)		241.5 x 440 x 609.8 mm / 8.72 x 17.32 x 24.01 inch						
Weight		32 kg /70.48 lbs						

Modules		Tester		Specification of Modules			
		11802/ 11890/ 11891	11805	11803	Voltage Output	Max. Current Output	Frequency (kHz)
<b>H.F. Current Step-up Modules</b>							
A118011	●				0.1V~10V, ±(5% of setting + 0.05V) *2	2.5A~50A, ±(4% of setting + 0.05A) *2	200 kHz
A118015		●			0.5V~33V, ±(5% of setting + 0.15V) *2	0.2A~30A, ±(4% of setting + 0.1A) *2	200 kHz
A118019	●				0.2V~16V, ±(5% of setting + 0.1V) *2	0.2A~30A, ±(4% of setting + 0.1A) *2	200 kHz
A118037			●		0.50V~30V, ±(4% of reading + 0.3V)	0.5A~25.0A (500kHz), 0.5A~15.0A (1MHz), ±(3% of setting + 0.2A)	1 MHz
<b>H.F. Voltage Step-up Modules</b>							
A118014	●				0.05kV~2.50kV, ±(5% of setting + 0.01kV) *2	1mA~200mA, ±(4% of setting + 0.3mA) *2	200 kHz
A118016	●				5V~250V, ±(5% of setting + 1V) *2	0.01A~2A, ±(4% of setting + 5mA) *2	200 kHz
A118017	●				0.05kV~8.00kV, ±(5% of setting + 0.02kV) *2	60mA (100kHz)	200 kHz
A118018		●			0.05kV~1.00kV, ±(5% of setting + 0.01kV) *2	0.01A~1A, ±(4% of setting + 3mA) *2	200 kHz
A118031	●				0.05kV~5.00kV, ±(5% of setting + 0.01kV) *2	0.5mA~100mA, ±(4% of setting + 0.3mA) *2	200 kHz
A118032	●				0.05kV~1.00kV, ±(5% of setting + 0.01kV) *2	2.5mA~500mA, ±(4% of setting + 1mA) *2	200 kHz
A118034		●			0.01kV~2.5kV, ±(5% of setting + 0.01kV) *2	1.5mA~400mA, ±(4% of setting + 0.2mA) *2	200 kHz

Note\*1 : Under rated load and voltage correction is well performed

Note\*2 : For test frequency above 100kHz, multiply the accuracy error by 2 times

