

# Ripple Current Tester

Model No.

# 11800/11801/11810



## Ripple Current Tester Model 11800/11801 Model 11810

### KEY FEATURES

- Digital constant current output and constant peak voltage output control function
- Four terminal contact test jig design, ensure accurate monitoring of voltage dropped on capacitors under test (patent pending)
- Paired cooper-foil wiring test cable to reduce voltage drop on the current driving loop and to ensure accurate monitoring of ac level dropped on capacitors under test (patent pending)
- 0-500 V DC bias voltage source, 0.3% basic accuracy
- 0.01-30A, 100Hz/120Hz/400Hz/1kHz AC ripple current source, ( $\pm 0.5\%$  reading + 0.1% of range) basic accuracy (Model 11800)
- 0.01-10A, 20kHz-100kHz AC ripple current source, 2% basic accuracy (Model 11801)
- 0.1-10A, 20kHz-1MHz AC ripple current source (Model 11810)
- Monitoring software (option) for multiple Ripple Current Testers
- Lower power consumption and lower electricity cost
- Large LCD display (320 x 240 dot-matrix)
- Alarm for indicating of normal or abnormal test termination, Tested time will be recorded if the test is terminated abnormally. An automatic discharge is always performed after test termination
- Standard RS485 interface is provided for computer monitoring
- Optional 20-fixtures Series or Parallel test jigs
- Digital timer inside
- CE marking (Model 11800/11801)

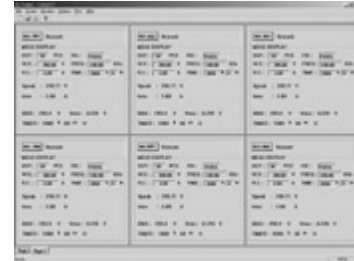


Model 11801

The Chroma 11800/11801/11810 Ripple Current Tester is a precision tester designed for electrolytic capacitors load life testing. Provides constant ripple current output and constant peak voltage ( $V_{peak} = V_{dc} + V_{ac\_peak}$ ) output digital control function. Let load life testing for electrolytic capacitors becomes easier and more reliable. And, The Chroma 11800/11801/11810 use excellent output amplifier design technology to reduce power consumption and internal temperature rising. For long time testing requirement, it can reduce electricity cost and perform high stability. The Chroma 11800/11801/11810 is a just right test solution for electrolytic quality evaluation.

### ORDERING INFORMATION

- 11800** : Ripple Current Tester 1kHz
- 11801** : Ripple Current Tester 100kHz
- 11810** : Ripple Current Tester 1MHz
- A118004** : Series Test Fixture
- A118005** : Parallel Test Fixture
- A118010** : Monitoring Software for Model 11800/11801
- A118028** : Series Test Fixture for Low Voltage
- A118030** : PCB for SMD Capacitor



A118010 : Monitoring Software

SPECIFICATIONS			
Model	11800	11801	11810
<b>Ripple Current Source</b>			
<b>Current Output Range</b>	0.01-30A	0.01-10A	0.1-10A
<b>Frequency</b>	100Hz/120Hz/400Hz/1kHz $\pm 0.1\%$	20kHz-100kHz	20kHz-1MHz
<b>Accuracy *1</b>	0.010A-0.199A	$\pm (0.5\% \text{ of reading} + 0.1\% \text{ of range})$	$\pm (3\% + 0.005 \text{ A})$
	0.20A-1.99A		$\pm (2.5\% + 0.05 \text{ A})$
	2.0A-10A		$\pm (2\% + 0.2 \text{ A})$
	10.0A-30A		--
<b>Ripple Voltage Output Range</b>	90Vrms / 10Arms, 30Vrms / 30Arms	15Vrms maximum	
<b>DC Bias Voltage Source</b>			
<b>Voltage Output Range</b>	DC 0 ~ 500V, $\pm (0.3\% + 0.05V)$		
<b>Charge Current</b>	200mA max.		
<b>Signal Monitor Parameter Accuracy</b>			
<b>Irms (Ripple Current)</b>	0.001A-0.199A	$\pm (0.5\% \text{ of reading} + 0.1\% \text{ of range})$	$\pm (2\% + 0.005 \text{ A})$
	0.20A-1.99A		$\pm (2\% + 0.05 \text{ A})$
	2.0A-10A		$\pm (2\% + 0.2 \text{ A})$
	10.0A-30A		--
<b>Vpeak (Normally, set to capacitor rated voltage)</b>	$V_{peak} = V_{dc} + V_{ac\_peak}$		
<b>Vdc (DC Bias Voltage)</b>	$\pm (0.3\% + 0.05V)$		
<b>Vrms (Ripple Voltage)</b>	0-1.99V, $\pm (0.3\% \text{ of reading} + 0.5\% \text{ of range})$ 2.00-19.99V, $\pm (0.3\% \text{ of reading} + 0.1\% \text{ of range})$ 20.00V-200.0V, $\pm (0.3\% \text{ of reading} + 0.1\% \text{ of range})$	$\pm (1\% + 0.005V)$	$\pm (1\% + 0.005V) * 2$
<b>Control Function</b>			
Timer	1 min-10000 hour, 30min error per year		
Interface	RS-485 (Standard)		
Display	320 x 240 dot-matrix LCD display		
Operation	Start, Stop, Continue		
Protection	OCP, OTP, Over Load		
<b>General</b>			
Operation Environment	Temperature : 10°C-40°C, Humidity : < 90 % RH		
Power Consumption	3000 VA max.	700 VA max.	3000 VA max.
Power Requirement	220Vac $\pm 10\%$ ; 48 Hz -62 Hz		
Dimension (H x W x D)	221.5 x 440 x 609.8 mm / 8.72 x 17.32 x 24.01 inch	353.6 x 440 x 609.8 mm / 13.92 x 17.32 x 24.01 inch	221.5 x 440 x 609.8 mm / 8.72 x 17.32 x 24.01 inch
Weight	54 kg / 118.94 lbs	60 kg / 132.16 lbs	54 kg / 118.94 lbs

Note\*1 : 23  $\pm$  5°C

Note\*2 : Multiple accuracy for test frequency 20-99kHz (x 1), 100-499kHz (x 2.5), 500kHz-1MHz (x 5)