

## GF6018A

### Clamp Type Multimeter Calibrator

The equipment is compliance with national verification regulation: JJG124—2005 “Ammeter, voltmeter, power meter and resistance meter verification rules” and related national standards. 0.05 single-phase AC/DC standard source, can verify magnitude 0.2 and the following AC/DC voltmeter, ammeter, frequency meter, resistance meter. The source signals by using DSP and 16-bit high-speed analog-to-digital converters of controllable sine wave, the distorted wave signal source.

The equipment comes with RS-232 interface, can be connected with PC to a semi-automatic verification system. It has precise interface and multi-functions including verification, storage and query.

The equipment adopts color LCD screen, chart character display is clear, with high precision, stable and reliable, convenient operation and flexible characteristics.



## Features

1. It can be semi-automatic or manual inspection of analog multi meter, clamp type current meter, all kinds of electric meter, (voltmeter, ammeter, frequency meters, resistance meter) basic error.
2. The equipment can be generated with 2-31 harmonic wave, harmonic number, order, amplitude and harmonic phase of fundamental wave can be programmed.
3. Power amplifier working frequency range is 40Hz-1KHZ, has a good linear. Current amplifier is constant current source; voltage amplifier is constant voltage source. Because of light weight, this device is more suitable for field use.
4. With RS-232 interface, this device is controlled by PC through the PC software (optional), can be automatic or manual inspection, and the results are processing and management
5. Has a non-volatile memory, it can store 500 pieces of the raw data of tested meter, for access and upload.

## Parameters

### Electrical parameters

Power supply	Single phase AC 220V±10% or 110V±10%, 50/60HzAC
<b>AC Voltage output</b>	
Range	200mV, 400mV, 2000mV, 4000mV, 20V, 100V, 200V, 500V, 1000V

**Electrical parameters - continued**
**AC Voltage output - continued**

Range 20V-1000V	Accuracy	$\pm(0.03\%RD+0.02\%FS)$
	Stability	$\leq 0.01\% FS / 60s$
Range 200mV-4000mV	Accuracy	$\pm(0.3\%RD+0.2\%FS)$
	Stability	$\leq 0.04\% FS / 60s$
Load capacity		20VA
Waveform distortion		$\leq 0.3\%$
Adjustable Range		0-120% FS (1000V not included)
Fineness		$5 \times 10^{-5}$

**AC Current Output**

Range		2mA, 4mA, 20mA, 40mA, 0.2A, 0.5A, 2A, 5A, 10A, 20A
Range 0.2A-20A	Accuracy	$\pm(0.03\%RD+0.02\%FS)$
	Stability	$\leq 0.01\% FS / 60s$
Range 2mA-40mA	Accuracy	$\pm(0.3\%RD+0.2\%FS)$
	Stability	$\leq 0.04\% FS / 60s$
Load capacity		20VA
Waveform distortion		$\leq 0.3\%$
Adjustable Range		0-120% FS
Fineness		$5 \times 10^{-5}$

**Frequency Output**

Range		45-65Hz
Fineness		0.001Hz
Accuracy		0.01Hz

**Harmonic Wave**

Times		2-31
Extent		0-20%
Each harmonic phase fineness		$0.01 \cdot N$ (N is harmonic order)

**DC voltage output**

Range		200mV, 400mV, 2000mV, 4000mV, 20V, 40V, 100V, 200V, 400V, 1000V
Load capacity		20W
Adjustable range		0-110% FS (1000V not included)
Adjustable fineness		$5 \times 10^{-5}$
Stability		$\leq 0.01\% FS / 60s$ (peak-peak value)
Accuracy		$\pm(0.03\%RD+0.02\%FS)$
Ripple wave		$\leq 1\% FS$

**Electrical parameters - continued**
**DC current output**

Range	20uA, 40uA, 200uA, 400uA, 2mA, 4mA, 20mA, 40mA, 0.2A, 1A, 2.5A, 5A, 10A, 20A
Load capacity	20W
Adjustable Range	0-110% FS (1000V not included)
Adjustable Fineness	$5 \times 10^{-5}$
Stability	$\leq 0.01\%$ FS /60s (peak-peak value)
Accuracy	$\pm(0.06\%RD+0.04\%FS)$
Ripple wave	$\leq 1\%$ FS

**Resistance box**

Range	0-200 $\Omega$ , 200-400 $\Omega$ , 0-2k $\Omega$ , 2k $\Omega$ -4k $\Omega$ , 0-20k $\Omega$ , 20k $\Omega$ -40k $\Omega$ , 0-200k $\Omega$ , 200k $\Omega$ -400k $\Omega$ , 0-2M $\Omega$ , 2M $\Omega$ -4M $\Omega$	
Fineness	0.02%	
Range 0-2k $\Omega$ , 0-20k $\Omega$ , 0-200k $\Omega$		
Range 0-2k $\Omega$	Adjustable Range	0-100%FS
	Accuracy	$\pm(0.12\%RD+0.08\%FS)$
Range 0-200 $\Omega$ , 0-2M $\Omega$	Adjustable Range	0-100% FS
	Accuracy	$\pm(0.3\%RD+0.2\%FS)$
Range 2k $\Omega$ -4k $\Omega$ , 20k $\Omega$ -40k $\Omega$ , 200k $\Omega$ -400k $\Omega$		
Range 2k $\Omega$ -4k $\Omega$	Adjustable Range	5%-100%FS
	Accuracy	$\pm(0.12\%RD+0.08\%FS)$
Range 200-400 $\Omega$ , 2M $\Omega$ -4M $\Omega$	Adjustable Range	5%-100% FS
	Accuracy	$\pm(0.3\%RD+0.2\%FS)$

**Clamp meter range**

200A	Accuracy	$\pm 0.2\%$
600A	Accuracy	$\pm 0.5\%$
1000A	Accuracy	$\pm 1\%$

**Dot frequency square wave output**

Range	1kHz, 5kHz, 10kHz, 50kHz, 100kHz, 200kHz, 1000kHz
Square wave amplitude	4.5V
Setting accuracy	$5 \times 10^{-5}$

**Mechanical parameters**

Dimension (L×W×H) (mm)	440x360x160
Weight (kg)	12

**Environmental conditions**

Operating temperature	20°C $\pm$ 10°C
Relative humidity	$\leq 85\%$ RH