

GF6019

Portable Calibration Equipment Dc Standard Power Source

GF6019 DC calibrator/DC power source is suitable for national metrology and testing center, electricity power company and power plants metrology department, electric metrology and testing institutions, also suitable for railway, petroleum, chemical industry and large industrial and mining enterprises, etc.

This GF6019 calibration test equipment can as high accuracy 0.02% DC voltage source and current source, range from 0 to 1050V and 0 to 30A. Its voltage and current channels are independent, high power linear power amplifier, programmable control to output. GF6019 DC power source is a high precision and ideal test equipment in electrical laboratory. This device have been used in global standard ISO17025 laboratory.

Function & Features

1. Meet ISO17025 lab standard;
2. Testing DC voltmeter, ammeter;
3. Adopting DSP+ FPGA technology;
4. Support program-control by user;
5. Multi-range, high precision 0.02%;
6. Small size, light weight, easy to operate;
7. Testing DC power meter and DC transducer;
8. 5.6 inch TFT color LCD screen, English display;
9. Using software calibration, stable and reliable;
10. Manual range, used for testing the DC indicate meter;
11. Automatic range, used for testing the DC digital meter;
12. As DC current source, voltage source, DC power source;
13. Data management, inquiry and print the test certificate;
14. A wide range, covering for instrument often dosage limit;
15. It can output the standard DC voltage, DC current, DC power;
16. It is built-in indicating meter and DC standard source verification procedures;
17. With RS232, PC software control component semi-automatic verification system;



Application

1. Universities;
2. Power plant;
3. DC energy meter R & D;
4. Electrical testing center;
5. Transducer manufacturers;
6. Digital meter manufacturers;
7. Pointer meter manufacturers;
8. Railway electrical department;
9. ISO17025 Electrical laboratory;
10. DC panel meter manufacturers;
11. DC power meter manufacturers;
12. Electricity power bureau & power company;
13. National metrology and testing department;
14. Electrical Department of industrial and mining enterprises;

Parameters

Electrical parameters	
Accuracy class	0.05%, 0.02%
Power supply	Single phase AC 220V±10% or 110 V±10%, 50/60 Hz
DC Voltage output	
Range	100mV, 300mV, 1V, 3V, 10V, 100V, 300V, 600V, 1000V, (max 1050V)
Adjustment range	(0-120)% RG
Adjustment resolution	0.01% RG, 0.1% RG, 1% RG, 10% RG
Accuracy	0.012% RD + 0.008% RG(≥1V); 0.03% RD + 0.02% RG(< 1V)
Stability	0.005% RG / 1 min(≥1V); 0.01% RG / 1 min(< 1V)
Distortion degree	Better than 0.1% (not capacitive load)
Load Capacity	Max 25VA
Ripple contents	≤1%
Full load regulation rate	Less than 0.01% RG
Full load regulation time	Less than 10mS
Temperature drift	8 PPM/°C
Long-term stability	60 PPM/year
DC Current output	
Range	10uA, 30uA, 100uA, 300uA, 1mA, 3mA, 10 mA, 30mA, 100mA, 300mA, 1A, 3A, 10A, 30A(max 30A)
Adjustment range	(0-120)% RG
Adjustment resolution	0.01% RG, 0.1% RG, 1% RG, 10% RG
Accuracy	0.03% RD + 0.02% RG
Stability	0.01% RG/1 min
Distortion degree	Better than 0.1% (not capacitive load)
Load Capacity	48VA
Ripple contents	≤1%
Full load regulation rate	Less than 0.01% RG
Full load regulation time	Less than 10mS
Temperature drift	8 PPM/°C
Long-term stability	60 PPM/year
DC Power output	
Accuracy	0.05%, 0.02%
Stability	0.01% RG / 1 min
Functions	
Communication Port	RS232
Programmable controlled	Yes
Key	19pcs
LCD	5.6 inch color display

Electrical parameters - continued
Standard

Standard	IEC 62053-21,22, 23; IEC 60736; ANSI C12.20-2002; JIG 597-2005; JIG596-2012; JIG 1085-2013; JJF 68-2019; GB/T 33708-2017; JIG 842-2017; DL/T 1112-2017
----------	--

Safety

Isolation protection	IEC 61010-1:2001
Measurement Category	300 V CAT III, 600 V CAT II
Degree of protection	IP20
Declaration of conformity	CE & CNAS certified

Mechanical parameters

Dimensions (WxDxH) (mm)	440x360x160
Weight (kg)	12

Environmental conditions

Operating temperature	0°C to 50°C
Storage conditions	-30°C to 60°C
Relative humidity	≤85%