

GF6019D

High Precision DC Energy Meter Test Equipment

The GF6019D high precision DC energy meter test equipment consists of an DC voltage standard source, DC current standard source and DC power source. (up to 1150V/600A) and built-in DC electronic reference standard of accuracy class 0.05%. Characteristic features of the GF6019D are its wide measuring range, high accuracy and high tolerance to unwanted external influences. The equipment offers high functionality combined with an excellent menu guided operation via built-in keyboards and colored 8" LCD-display. It can test DC energy meter basic error, starting test, creep test, error of time of day.

Functions

1. User friendly menu guided operation;
2. Testing all kinds of DC energy meter error;
3. Testing all kinds of DC power meter error;
4. DC current source and DC voltage source;
5. Easy verification and analysis of DC meter;
6. Testing all kinds of DC ammeter, DC voltmeter error;
7. Automatic operation without need of an external PC;
8. Especially configured USB stick for storage of customer data;



Features

1. Stability 0.01%/min;
2. 8 inch TFT touch screen;
3. Accuracy class 0.05 or 0.02;
4. DC power source integrated;
5. Test by automatic or manual;
6. Setting several testing scheme;
7. Start testing and creep testing;
8. 0-600A/0-1150V or 0-100A/0-800V;
9. Any programmable load testing point;
10. Recorder 10000 sets energy meter data;
11. Overload, short circuit, open circuit protection;

Parameters

Electrical parameters	
Accuracy	0.05%; 0.02%
Power Supply	One Phase AC 180-265V or 85-150V, frequency 50/60Hz.
DC Voltage Output	
Range	100V, 350V, 500V, 700V (max 800V); 65V, 250V, 500V, 750V, 1000V (max 1150V)
Adjustment range	(0-120)%RG ⁽¹⁾

Electrical parameters - continued	
DC Voltage Output - continued	
Adjustment fineness	0.01%RG, 0.1%RG, 1%RG, 10%RG as optional.
Stability	0.01%/120s
Distortion	0.1% (Non-capacitive load)
Output load	20VA or 50VA
Full load regulation rate	$\leq \pm 0.01\%RG$
Accuracy	$\pm(0.03\%RD+0.02\%RG)$
DC Current Output	
Range	75mV, 2A, 20A, 50A, 100A; 0.001A, 0.005A, 0.02A, 0.05A, 0.2A, 1A, 3A, 10A, 20A, 50A, 100A, 500A (max 600A) small signal 2.5mV, 20mV, 100mV, 1V, 5V
Adjustment range	(0-120)%RG
Adjustment fineness	0.01%RG, 0.1%RG, 1%RG, 10%RG as optional.
Stability	<0.01%/120s
Distortion	$\leq 0.1\%$ (Non-capacitive load)
Output load	150VA or 1200VA
Full load regulation rate	$\leq \pm 0.01\%RG$
Accuracy	$\pm(0.03\%RD+0.02\%RG)$
Externally attached shunt	100mV
Accuracy	$\pm(0.06\%RD+0.04\%RG)$
DC Power Output	
power output stability	<0.01%RG/120s
power accuracy	$\pm(0.03\%RD+0.02\%RG)$
DC Power Energy Measurement Error	
power energy	$\pm(0.03\%RD+0.02\%RG)$
Power Pulse Output	
Power Pulse Output	20KHz (Full-Range)
Power Pulse Input	
Energy pulse input	20KHz
Ripple output	20-500Hz ripple output
Communication port	USB port, RS232, 10/100M LAN
Standard	
Standard	JJG842-2017; JJG1085-2013; GB/T 33708-2017; IEC60664-1:2007

Electrical parameters - continued**Safety**

Isolation protection	IEC 61010-1:2001
Measurement Category	1000 V CAT III
Degree of protection	IP20
Declaration of conformity	CE certified

Mechanical parameters

Dimensions (WxDxH) (mm)	460x460x175; 630x600x450
Weight (kg)	20; 55

Environmental conditions

Ambient temperature	-10°C to +40°C
Relative humidity	35%-85%

(1) RG means range, the same as below;

(2) RD means the setted harmonic content, harmonic can be a single output, also multiple output.