

GF1119

EV & CHARGING PILE DC TEST SET

GF1119 EV & Charging pile DC on-site comprehensive test set for off-board charger integrates some functions such as on-site calibrator, power analyzer, oscillographic recorder, BMS simulator software, vehicle DC interface circuit simulation box, insulation resistance tester and so on. It cooperates with the load to meet the test requirements of metrological verification, interoperability test and protocol consistency test, and meet the requirements of test items in the acceptance stage and operation stage of State Grid No. 45 document. Interoperability detection process, real-time graphical display of waveform and message, and clear working status at a glance. The device has built-in WiFi module, data can be transmitted wirelessly, and remote control can be realized through wireless devices such as tablet computers. Technically, GF1119 uses various cutting-edge technologies to make the equipment high-performance, such as 24bit sigma delta ad, imported high stability zero flux transformer and dual core DSP with main frequency of 500M.

Features

1. High accuracy 0.05%;
2. Automatic and manual test optional;
3. Using 24bit A/D sampling technology;
4. Recorder 10000 sets energy meter data;
5. With Li-battery, working more than 8 hours;
6. Wide range design from 0-300A/0-1200V DC;
7. Portable, small size, drag bar box structure design;
8. ISO17025 electrical metrology laboratory standard;
9. Built in WIFI, it can be controlled by PDA, PC computer;
10. Programmable multi-plan for testing EV & DC Charging pile;
11. Using multi closed loop zero flux sensor and PGA Technology;
12. Commissioning experience of 100 models EV & DC charging pile;
13. Safety test, performance test, Compatibility test, Metrological test;
14. According to JJG 1149-2018, GB/T 34657.1-2017 & GB/T34658-2017 Standard;
15. Internal high-voltage and low-voltage isolation to protect the safety of operators;
16. Integrated design concept, built-in reference meter, insulation resistance tester, oscilloscope, interface simulator, power analyzer etc;



Applications

1. Electrical laboratory;
2. EV & Charging pile factory;
3. Metrological service center;
4. Laboratories of power utilities;
5. Third party testing organization;
6. National Metrology and testing department;
7. Electricity power bureau & power company;
8. Charging pile operation and maintenance organization;

Test Item



Functions

1. CC interrupt test;
2. CP interrupt test;
3. CP grounding test;
4. Charging readiness test;
5. Output overcurrent test;
6. JJG 1148-2018 Standard;
7. Testing of working error;
8. Display error verification;
9. Insulation resistance test;
10. Normal charging end test;
11. CP loop voltage limit test;
12. GB/T 34657.1-2017 Standard;
13. Disconnect switch S2 test;
14. Testing of clock indication error;
15. Connection confirmation test;
16. Start up and charging phase test;
17. Testing of payment amount error;
18. Temperature and humidity detection.
19. Charging connection control sequence test;
20. Continuity loss test of protective grounding conductor;

Parameters

Electrical parameters	
Accuracy	0.05%
Power Supply	One Phase AC 100-265V, frequency 50/60Hz; Li-battery
Power consumption	<100VA
DC Voltage Measurement	
Range	0-1000V (max 1200V)
Accuracy	±0.02%
DC Current Measurement	
Range	0-300A
Accuracy	±0.02%

Electrical parameters - continued
DC Power Measurement

Accuracy	$\pm 0.05\%$ (1V-1000V, 5A-300A)
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DC Power Energy Measurement Error

Power energy	$\pm 0.05\%$ (1V-1000V, 5A-300A)
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Power Pulse Output

Power Pulse Output	0 - 100KHz, >20mA, one channel, level 5V
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Energy Pulse Input

Energy pulse input	0 - 100KHz, one channel, level 3-12V
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Ripple Measurement

Range	1Hz-6KHz
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Accuracy	$\pm 0.5\%$
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Insulation Resistance Measurement

Voltage Range	0-1000V
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Resistance range	0-50M Ω
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Accuracy	$\pm 5\%$ (1~50M Ω)
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Power Analyzer(AC)

AC voltage input(L1\L2\L3\N)	220V $\pm 20\%$ ($\pm 0.05\%$ RD)
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AC current input(IL1\IL2\IL3)	0.1-500A($\pm 0.5\%$ RG) (current sensor optional)
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Accuracy	$\pm 0.5\%$
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Voltage harmonic times	2-127 times
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Current harmonic times	2-127 times
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Wave Recorder Measurement

Voltage input Range	0- ± 1000 V
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Accuracy	$\pm 1\%$ RG
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Waveform Capture Resolution	10us
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CAN Baud Rate	250kbit/s
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Temperature Measurement

Range	-40°C to +80°C
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Accuracy	$\pm 0.2^\circ\text{C}$
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Resolution	0.1°C
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Electrical parameters - continued
Humidity Measurement

Range	0%RH-99.99%RH
Accuracy	±5%RH
Resolution	0.1%RH

Function

LCD Display	10 inch 800x600 touch TFT
Energy accumulation	Yes
Self-calibration	Yes
Data storage	Yes
Auto test	Yes
GPS	Yes
Test Report (word file) download	Yes
PC software	Optional
Communication port	USB, RS232, WIFI, 10/100M LAN

Standard

Standard	IEC 62053-21,22, 23; IEC 60736; ANSI C12.20-2002; JIG-842-2017; JIG596-2012; JIG 1085-2013; JIG 1049-2018; JJF 68-2019; DL/T 1478-2015; DL/T 448-2016; GB/T 33708-2017; JIG 1148-2018; GB/T 34657.1-2017
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Safety

Isolation protection	IEC 61010-1:2001
Measurement Category	300 V CAT III, 600 V CAT II
Degree of protection	IP65
Declaration of conformity	CE & CNAS certified

Mechanical parameters

Dimensions (WxDxH) (mm)	570x418x285
Weight (kg)	20

Environmental conditions

Ambient temperature	-20°C to +50°C
Storage temperature	-30°C to +65°C

Environmental conditions - continued

Relative humidity	10%-85%
Temperature coefficient	$\leq 0.005\% / ^\circ\text{C}$
Influence of external fields	$\leq 0.05\% / \text{mT}$