GF1119B

DC EV CHARGING TESTER WITH 8KV LOAD

GF1119B DC EV charging tester 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 & Functions

1. With 8KW DC load;
2. High accuracy 0.05%;
3. Automatic and manual test optional;
4. Using 24bit A/D sampling technology;
5. Recorder 10000 sets energy meter data;
6. Meet CCS2 Europe port & CCS1 USA port;
7. With Li-battery, working more than 8 hours;
8. Wide range design from 0-300A/0-1200V DC;
9. Portable, small size, drag bar box structure design;
10. ISO17025 electrical metrology laboratory standard;
11. Built in WIFI, it can be controlled by PDA, PC computer;
12. Programmable multi-plan for testing EV & DC Charging pile;
13. Using multi closed loop zero flux sensor and PGA Technology;
14. Commissioning experience of 100 models EV & DC charging pile;
15. Safety test, performance test, Compatibility test, Metrological test;
16. According to JJG 1149-2022, GB/T 34657.1-2017 & GB/T34658-2017 Standard;
17. Internal high-voltage and low-voltage isolation to protect the safety of operators;
18. Integrated design concept, built-in reference meter, insulation resistance tester, oscilloscope, interface simulator, power analyzer etc;

Test Item

1. CC interrupt test;
2. CP interrupt test;
3. CP grounding test;
4. Charging readiness test;
5. JJG 1149-2022 Standard;
6. Output overcurrent test;
7. Testing of working error;
8. CP loop voltage limit test;
9. Display error verification;
10. Insulation resistance test;
11. Normal charging end test;
12. Disconnect switch S2 test;
13. GB/T 34657.1-2017 Standard;
14. Connection confirmation test;
15. Testing of clock indication error;
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;

Applications

1. EV & Charging pile factory;
2. Metrological service center;
3. ISO17025 Electrical laboratory;
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;

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	0-250A (max 300A)
Accuracy	±0.02%
DC Power Measurement	
Accuracy	±0.05%(1V-1000V, 5A-300A)
DC Power Energy Measurement Error	
power energy	±0.05%(1V-1000V, 5A-300A)

Electrical parameters - continued	
Power Pulse Output	
Power Pulse Output	0 - 100KHz , >20mA, one channel, level 5V
Energy Pulse Input	
Energy pulse input	0 - 100KHz, one channel, level 3-12V
Ripple Measurement	
Range	1Hz-6KHz
Accuracy	±0.5%
Insulation Resistance Measurement	
Voltage Range	0−1000V
Resistance range	0−50MΩ
Accuracy	±5% (1～50MΩ)
Power Analyzer(AC)	
AC voltage input(L1\L2\L3\N)	220V±20% (±0.05%RD)
AC current input(IL1\IL2\IL3)	0.1-500A(±0.5%RG) (current sensor optional)
Accuracy	±0.5%
Voltage harmonic times	2-127 times
Current harmonic times	2-127 times
Wave Recorder Measurement	
Voltage input Range	0-±1000V
Accuracy	±1%RG
Waveform Capture Resolution	10us
CAN Baud Rate	250kbit/s
Temperature Measurement	
Range	-40°C to +80°C
Accuracy	±0.3°C
Resolution	0.1°C
Humidity Measurement	
Range	0%RH-99.99%RH
Accuracy	±5%RH
Resolution	0.1%RH
Load	
Range	0-8KW (Support cascading expansion)
DC voltage	850V
Gear numbers	3

Electrical parameters - continued	
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; IEC 62196-2; IEC 62196-3; JJG-842-2017; JJG596-2012; JJG 1085-2013; JJG 1049-2022; JJF 68-2019; DL/T 1478-2015; DL/T 448-2016; GB/T 33708-2017; JJG 1148-2018; GB/T
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 (W×D×H) (mm)	365×212×532
Weight (kg)	12
Environmental conditions	
Ambient temperature	-20°C to +50°C
Storage temperature	-30°C to +65°C
Relative humidity	10%-85%
Temperature coefficient	≤0.005% /℃
Influence of external fields	≤0.05 %/mT