

GF1115

PORTABLE AC EV CHARGER TESTER

GF1115 portable AC EV charger tester integrates some functions such as on-site calibrator, oscillograph recorder, vehicle AC interface circuit simulation box, insulation resistance tester and leakage state simulator. It cooperates with the load, meets the test requirements of metrological verification and interoperability test, and fully meets the requirements of test items inspected in the acceptance stage and operation stage of State Grid. Interoperability detection process, real-time graphical display of waveform, and clear working state at a glance. The device has built-in WiFi module, and the data can be transmitted wirelessly through the tablet. And other wireless devices to achieve remote control. Technically, GF1115 uses various cutting-edge technologies to achieve high performance, such as 24bit high-speed and high-precision synchronous sampling AD and 500M dual core DSP CPU.

Applications

1. EV & Charging pile factory;
2. Metrological service center;
3. Laboratories of power utilities;
4. ISO17025 Electrical laboratory;
5. Third party testing organization;
6. National Metrology and testing department;
7. Electricity power bureau & power company;
8. Charging pile operation and maintenance organization;



Features

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|---|---|
| 1. As a waveform recorder; | 11. Automatic generation of test report; |
| 2. With PC software optional; | 12. Automatic and manual test optional; |
| 3. Wide range 0-480V/0-80A; | 13. Using 24bit AD sampling technology; |
| 4. Waveform display function; | 14. With Li-battery, working more than 8 hours; |
| 5. High stability, high reliability; | 15. Portable, small size, drag bar box structure design; |
| 6. Energy accumulating function; | 16. Suit for testing EV & Charging AC pile error on site; |
| 7. High accuracy class up to 0.05%; | 17. Built in WIFI, it can be controlled by PDA, PC computer; |
| 8. Measuring 2nd~127th harmonics; | 18. According to JJG 1149-2018 & GB/T 34657.1-2017 Standard; |
| 9. Metal structure, strong and reliable; | 19. Safety test, performance test, Compatibility test, Metrological test; |
| 10. Integrated design concept, built-in reference meter, insulation resistance tester, oscilloscope, interface simulator, power analyzer etc; | |

Test Item

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

Parameters

Electrical parameters	
Accuracy class	0.05%
Power supply	One Phase AC 100-265V, frequency 50/60Hz; Li-battery
Power consumption	<100VA
Voltage measurement	
Range	380V (0-480.000V)
Error	±0.02% (30V-480V)
Harmonic	2 nd -127 nd
Current measurement	
Range	63A (0-80.000A)
Error	±0.02% (1A-80A)
Harmonic	2 nd -127 nd
Power measurement error	
Active power	±0.05% (1A-80A, 30-480V)
Energy measurement error	
Active energy	±0.05% (50%-120%Un)/(1%-110%In)
Phase angle	
Range	0°-360.000°
Resolution	0.01°
Error	±0.02°
Power factor	
Range	-1.00000-0-1.00000
Resolution	0.00005
Error	0.00001

Electrical parameters - continued
Frequency

Range	45.0000-65.0000Hz
Resolution	0.001
Error	±0.005

Pulse output

Output channel	1
Energy constant	1-9999999
Pulse ratio	1:1
Output level	5V
Output rated frequency	0-100KHz

Pulse input

Input channel	1
Input level	3-12V
Input frequency	0-100KHz

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	±0.2°C
Resolution	0.1°C

Humidity Measurement

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

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	RS232, USB, WIFI, 10/100M LAN

Standard

Standard	IEC 62053-21,22, 23; IEC 60736; ANSI C12.20-2002; JJG 597-2005; JJG596-2012; JJG 1085-2013; JJG 1148-2018; GB/T 34657.1-2017; JJF 68-2019; DL/T 826-2002; DL/T
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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 (W×H×D) (mm)	570×418×285
Weight (kg)	19

Environmental conditions

Ambient temperature	-20°C to +50°C
Storage temperature	-30°C to +65°C
Relative humidity	10%-85%
Temperature coefficient	≤0.005% /°C
Influence of external fields	≤0.05 %/mT