

## GF1115

### PORTABLE EV & CHARGING PILE AC TEST SET

GF1115 EV & charging pile AC on-site comprehensive test set 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.

### Features

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



## Applications

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

## Functions

1. CP interrupt test;
2. CC 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. CP loop voltage limit 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;



## Parameters

### Electrical parameters

Accuracy class	0.05%
Power supply	One Phase AC 100-265V, frequency 50/60Hz; Li-battery
Power consumption	<100VA

**Electrical parameters - continued**
**Voltage measurement**

Range	380V (0-480.000V)
Error	±0.02% (30V-480V)
Harmonic	2 <sup>nd</sup> -127 <sup>nd</sup>

**Current measurement**

Range	63A (0-80.000A)
Error	±0.02% (1A-80A)
Harmonic	2 <sup>nd</sup> -127 <sup>nd</sup>

**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

**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

**Electrical parameters - continued**
**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

**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

**Electrical parameters - continued**
**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 1478-2015; DL/T 448-2016;
----------	--

**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