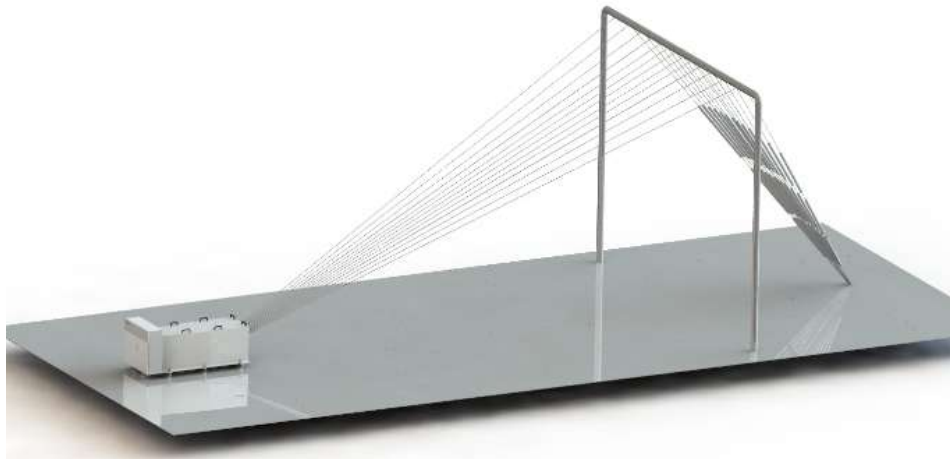


EMP Test System

Application

This system is mainly used for conducting nuclear electromagnetic pulse sensitivity tests on electronic systems.

It can apply a maximum pulse electric field of 50kV/m to the test object to test its reliability in a strong pulse electric field environment.



Standards

- 1) GJB151B-2013 RS105
- 2) GJB1389A Electromagnetic compatibility requirements for systems
- 3) IEC61000-2-10
- 4) GJB 8848-2016

Operation condition

Temperature: 0°C~45°C;

Relative humidity: ≤85%;

Operation: indoor;

Seismic resistance: Grade 8 strength;

No conductive dust, no fire or explosion hazards, and no gas that corrodes metals or insulation.

Features

Colorful touch panel for easy operation, user friendly and remote control;

Considerate safety measures;

Abnormal charging protection;

Automatic diagnosis of multiple faults such as charging overcurrent, overvoltage, and self discharge lamp;

Fiber optic remote communication control;
Program controlled DC high-voltage charging

Main Technical Parameters

Model	EMP100	EMP240	EMP300	EMP400	EMP800
Charging voltage	120kV	240kV	300kV	400kV	800kV
HV impulse power	120kV	240kV	300kV	400kV	800kV
TEM antenna	1.8m cone shaped transmission; Line simulator	3.6m cone shaped transmission; Line simulator	5m cone shaped transmission; Line simulator	6m cone shaped transmission; Line simulator	12m cone shaped transmission; Line simulator
Control system	Remote control	Automatic control with iMCS2000, remote control	Automatic control with iMCS2000, remote control	Automatic control with iMCS2000, remote control	Automatic control with iMCS2000, remote control
Dimension (LWH)	8*2.5*1.8m	15*4.5*3.6m	20*7*5m	24*8*6m	48*15*12m
Test area (LWH)	1.1* 1.2*0.9m	3* 2.5* 1.1m	3*3*1.6m	4*4*2m	8*8*4m
Installation dimension (LWH)	9*4.5*3m	20*7*6m	25*10*10m	28×12×10m	60*20*18m
Disassembly and installation	Rapid disassembly and installation		/	/	/
Rise time	2.3ns±0.5ns				
Pulse width	23ns±5ns				
Electric field strength	50kV/m				
Transmission line impedance	120Ω				
Charging time	10-999s adjustable				
Interval time	14-999s adjustable				
Power supply	AC 220V±10%, 50Hz, 20A				
Accessories for optional					
Pulse decoupling device	Model: DN-450T-COM; Operation voltage: AC450V/DC300V,3 phase 5 lines; Power frequency: DC-400Hz; Decoupling wave: 2.3/23ns; Load operating current: max. 50A; Used for EUT online testing to prevent any impact on the power supply				

Voltage probe	Model: RVP-200; Non inductive resistive voltage divider, measure voltage wave upto 200kV; Measure the wave of 2.3/23ns
Ground electric field probe	Model: EFP-100 Using D-DOT measurement technology, combined with integrator, it can measure 2.3/23ns electric field waveform up to 100kV/m; Measurement range: 5kV/m-100kV/m
Fiber optic electric field probe	Model: FFP-100; Using the original waveform probe; Directly cooperate with analog fiber optic signal transmission; The transmitting and receiving ends are included; Measurement range: 5kV/m-100kV/m
Measurement system	iMAS3000 measurement software with a laptop; Communicate with oscilloscope (Tektronix, Rigol and Agilent brand); Support GPIB, TCPIP and USB communication interfaces; Automatically measure and analyze waveform parameters, Output test reports
Oscilloscope	Tektronix, Rigol and Agilent brand