300 kV Mobile Deposition Electrostatic and Electrostatic Discharge Test System EDS 300B

- MIL - STD - 331D
- MIL - STD - 464D
- GJB 1389B - 2022
- GJB 573B - 2020
- GJB 8848 - 2016

Features

> Compact, integrated design
> Maneuverable test
> Gas insulation
> Pneumatic control
> Optical fiber remote measurement and control

Function

> Electrostatic discharge, sedimentary electrostatic discharge
> Contact discharge, charge deposition
> Energy calibration, voltage calibration
> Residual pressure measurement
> Temperature and humidity sensing

Introduction

ESD 300B 300 kv portable sedimentary static electricity and electrostatic discharge test system based on MIL - STD - 464 - d, MIL - STD - 331 - d, GJB 1389-2022 - b, 573-2020 - b, GJB GJB 8848-2016 standard designed to pray, With electrostatic discharge, sedimentary electrostatic discharge, contact discharge, charge deposition and other test capabilities, while with energy calibration, voltage calibration, residual voltage measurement and other functions, is currently the most complete 300kV electrostatic discharge test system, can be widely used in test testing, effect research, reinforcement verification and other fields.

ESD 300B 300 kv portable sedimentary static electricity and electrostatic discharge test system adopts high voltage power supply, energy storage capacitor, compact version of the test state switch, etc, the integration of design, has the strong ability of motor testing. This product can be measured and controlled at short range, and has remote measurement and control based on optical fiber transmission.

Application Areas

Technical parameters

300kV electrostatic discharge simulator EDS 300B technical parameters	
Maximum output voltage	300 kV (Scalable to 400kV)
Maximum current output	10mA
Energy-storage capacitor	1000pF
Discharge resistor	<1Ω
Loop inductance	<20μH
Energy transfer efficiency	≥80%
Generator structure	Enclosed, removable chassis
Use power	AC 220 V 5 kVA
Technical parameters of deposition electrostatic and electrostatic discharge test tower HVFDJ 400B	
Rack height	≥ 4 m, the discharge electrode height is continuously adjustable, and the stroke is ≥ 3 m
Discharge electrode expansion speed	The stepping speed is not greater than 0.03 m/s and is adjustable
Electrode elevation adjustable range	±60°
Electrostatic discharge electrode	Hemispherical, diameter ≥ 10 cm
Deposition of electrostatic discharge electrodes	Needle shape, diameter 30 cm, discharge needle number ≥15
Contact discharge electrode	Conical, cone Angle < 45 degrees, diameter ≥10 cm

EDS 300B Random standard configuration

1	High voltage electrostatic generator	Model: EDS 300B	
2	Electrostatic discharge test tower deposited charge test tower	Model: HVFDJ 400B For the deposition charge test, support the connection of high voltage wire lifting height of 4 M, using air motor control	
3	Electrostatic simulator control cabinet	Model: the EDS C300B An elevator used in high voltage electrostatic generator is used to control the output voltage test of state switch remote control signal node is given	

EDS 300B Random standard configuration

4	High voltage direct discharge electric rod	2 m to shrink for security grounding Ω 0 or 1 M Ω can switch	
5	Control and measurement analysis system (software)	Model: CoreLab The acquisition, reading and calculation of the waveform of attitude control test of deposition electrostatic and electrostatic discharge test tower	
6	Separation filter	Model: EDS300 - DGL10 Need to use two, respectively connected computers and dso scope complete field data collected and transmitted through optical fiber isolation to computer maximum power 200 w (220 v)	
7	Air compressor	Model: 1100 - 40(3540) Pneumatic switching of test state of high voltage electrostatic generator; Attitude control of electrostatic deposition and electrostatic discharge test tower	
8	Milliampere meter	Used to measure electrostatic discharge current of deposition	
9	Outgoing report		
10	Operating manual		

EDS 300B optional

1	Shielded box	Model: LCG464C - PBX Minimum shielding efficiency 60 dB @ f ≤100 MHz 30 dB @ 100 MHz < f < 1 GHz 20 dB @ 1 GHz < f ≤3 GHz 230 V, 10 A (Φ 5 × 20) power filter	
2	Oscilloscope	Model: Tektronix MDO32 3 - BW - 500 500 MHz Analog bandwidth 2.5GS / s sample rate	

EDS 300B optional

3	Broadband current monitoring pliers	Model: CM 0220M Maximum instantaneous Current:20 kA， Bandwidth:20 MHz 100:1	
4	500 kV divider	Model: HV - 500 Impedance 3 g Ω loaded with 100 mu A leakage current for charging voltage calibration	
5	Calibrated load impedance	Model: RFC - 100 Energy calibration 100 Ω low inductance built-in coaxial shunt impedance load 0.01 V/A, BNC output must be used with 50:1 attenuator	
6	Discharge rack	Model: EDS300 - FDJ - B Simulated load (SUT) for system debugging and demonstration	
7	Ground rod (T-shaped)	For security grounding Ω 0 or 1 m Ω can connect	

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