

# 300KV Electrostatic Discharge Test System Datasheet

EDS 300



## Introduction

When aircraft, emitter or weapon system is flying in the outer space with high speed, the air friction or accumulated charged particles may produce static electricity up to hundreds of KV. During loading or transportation, it may discharge, if these electrostatic discharge releases to exposed lead of the fuze electro-explosive device or release to the circuit which connects manipulator or related equipment and ammunition, may appear accidental detonation for electro-explosive device and lead to a series of dangerous situation or weapons to misfire. If the electronic components in the fuze withstand this high voltage, it may cause the parameter changes or failure for generators, this will influence signal process, timing, arming, ignition, etc.

According to EMC standard GJB 1389A (corresponding to American military standard MIL-STD-464) section 5.7, the system should have the ability to control and remove the accumulation of electrostatic charge caused by precipitation static effect, liquid flow, air flow, exhaust gas flow, people activities, means of delivery, space flight and other electrical charge, avoid to ignite fuel and endanger armaments, and prevent the electronic products from the performance degradation or damage.

The main test method is as per the electrostatic discharge test of GJB573A, this system can achieve 25KV human body electrostatic discharge and fuze electrostatic discharge tests. Furthermore, the precipitation electrostatic test accessories are optional for this system.

## Features

- > Colorful touch screen operation and remote control, set charging voltage freely
- > Using high voltage pulse capacitor without inductance
- > Multiple safety protection
- > Can complete human body electrostatic and control supply electrostatic test
- > Using flexible high voltage cable connection, safe and reliable
- > Separate mobile discharge mount
- > Optional for 100 KV electrostatic precipitation test
- > Optional for current measurement coil

## Application Areas

- > Communication
- > Telecom
- > Medical
- > TV and Broadcast
- > Railway
- > Information technology
- > Military
- > Aviation
- > New energy power

ESD 300 Technical Parameters	
Storage energy capacitor	500/1000 pF
Discharge resistance	500 $\Omega$ /1 $\Omega$
Voltage of capacitor	20~300 kV
Rising edge	15 ns for human body discharge less than 25 kV
Half width	150n s for human body discharge less than 25 kV
Charging voltage	20~300 kV
Discharge switch	tungsten copper ball with diameter 120
Switching mode	Cylinder motion triggered, moving distance 1 m
Generator structure	Oil-immersed, integrative sealing, coaxial generator
General Parameters	
Power supply	AC 220 V 10 A
Charging polarity	Positive/ Negative/ Single discharge
Current divider	Ross coil
Weight	1500 kg



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