300KV Electrostatic discharge test system  EDS 300

Summary

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.

Feature

- 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 100KV electrostatic precipitation test
- Optional for current measurement coil

Application

- Communication > Information technology
- Telecom > Military
- Medical > Aviation
- TV and Broadcast > New energy power
- Railway
### ESD 300 Technical Parameters:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage energy capacitor</td>
<td>500/1000pF</td>
</tr>
<tr>
<td>Discharge resistance</td>
<td>500 Ω/1 Ω</td>
</tr>
<tr>
<td>Voltage of capacitor</td>
<td>20~300kV</td>
</tr>
<tr>
<td>Rising edge</td>
<td>15ns for human body discharge less than 25kV</td>
</tr>
<tr>
<td>Half width</td>
<td>150ns for human body discharge less than 25kV</td>
</tr>
<tr>
<td>Charging voltage</td>
<td>20~300kV</td>
</tr>
<tr>
<td>Discharge switch</td>
<td>tungsten copper ball with diameter 120</td>
</tr>
<tr>
<td>Switching mode</td>
<td>Cylinder motion triggered, moving distance 1m</td>
</tr>
<tr>
<td>Generator structure</td>
<td>Oil-immersed, integrative sealing, coaxial generator</td>
</tr>
</tbody>
</table>

### General Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>AC 220V 10A</td>
</tr>
<tr>
<td>Charging polarity</td>
<td>Positive/ Negative/ Single discharge</td>
</tr>
<tr>
<td>Current divider</td>
<td>Ross coil</td>
</tr>
<tr>
<td>Weight</td>
<td>1500kg</td>
</tr>
</tbody>
</table>
CONNECT 3CTEST

SUZHOU 3CTEST ELECTRONIC CO., LTD

Unit 2, Anda Industrial park, Jinhan Rd, SND, Suzhou, 215011, China
Tel: +86-512-68413700/3800/3900
Fax: +86-512-68079795
Web: www.3ctest.cn
Email: info@3ctest.cn

SHENZHEN OFFICE

Room 402, the 4th floor, Fuan Technology Building, No.13, Nanshan Technology Park, 518053, Shenzhen, China
Tel: +86-755-86626625/86344313
Fax: +86-755-26966255

Korea

Contact person: Mr. Sungoh Woo
Email: woo@testek.co.kr
Tel: 070-4099-2072 / HP: 010-6500-6648
Address: 601Ho, SungwoonKoa, 141 Hyeonam-ro, Suji-Gu, Yongin-Si, Gyeonggi-Do, 448-808

BEIJING OFFICE

Room D206, D block, Keshi Building, No.28, Shangdixinxi Road, Haidian District, Beijing
Tel: +86-10-82899948/82899984
Fax: +86-10-82899943

CHENGDU OFFICE

Room 1501, Unit 3, Ideal Centre, No. 38 Tianyi Street, SND, 6100085, Chengdu, China
Tel: +86-28-85327800/85327600
Fax: +86-28-85311400

TAIWAN OFFICE

6F-5, No. 130, Ln. 235, Baoqiao Rd. Xindian District, New Taipei City, 23145, Taiwan
Tel: +886-2-89121185 Fax: 886-2-89121812
Email: rich.tec@msa.hinet.net

Europe

Yvonne McGlinchey
ymcglinchey@ARMworld.US
+353 61 504300
Address: First Floor Ashling Building, National Technology Park, Limerick, Ireland