

# Induced Signal Susceptibility Testing System ISS 1800

## Datasheet



### In Compliance with

> RTCA/DO-160G S19

### Introduction

The ISS 1800 induced susceptibility testing system is capable of generating alternating signals with frequency ranging from 350 Hz to 32 kHz, its voltage reaches up to 1800 V and maximum current is 40 A. The system conforms to the test requirement of Section 19 in RTCA DO160G and is made up of signal power amplifier, high voltage wide-band transformer, wide-band current transformer, high-precision digital multimeter and CoreLab testing software etc., It can be widely used in susceptibility tests of airborne equipment and other electrical devices.

### Features

- > Capable of obtaining transfer function automatically configured by the test system through self-check, greatly improving the accuracy of tests.
- > With voltage and current monitor port, parameters of induced signals applied can be monitored on line.
- > The electric/magnetic fields radiator and radiating wiring designed in accordance with standard requirement make the test setup easy and greatly improve the test effectiveness and repetition.

### Application Areas

- > Military
- > Airplane

Technical Parameters	
Open-circuit Voltage	1800 V
Short-circuit Current	40 A
Frequency Range	350 Hz~32 kHz
Magnetic Fields Induced into the Equipment (I)	20 A
Magnetic Fields Induced into Interconnecting Cables (IxL)	1.6 A·m-120 A·m
Electric Fields Induced into the Equipment (V)	170 Vrms
Electric Field Induced into Interconnecting Cables (VxL)	135 V·m-5400 V·m
Note: The above current and voltage are effective values.	

General Parameters	
Power Supply	AC 110 V/220 V, $\pm 10\%$ , 45 Hz~65 Hz
Ambient Temperature	0 °C~35 °C
Relative Humidity	15%~35%
Dimension	4U+6U
Weight	Approx. 40 kg

Accessories
user manual, test line, three-core cable, Ethernet switch, 25-core data line, radio frequency cable, power line, fuses, feedback compensation test line, network line

System Configuration	
1. Signal Power Amplifier	ISG 1800, DCP 1800
2. HV Wide-band Transformer	HWT 1800 (1800 V)
3. Wide-band Current Transformer	WCT 40 (40 A)
4. Current-limiting Resistor	CLR 1M (1 M $\Omega$ )
5. Electric Fields Radiator	ERB 20 (20 cm Length)
6. Magnetic Fields Radiator	HRB 60 (60 cm Length)
7. electric fields radiating wiring	ERL 5M (500 cm Length)
8. magnetic fields radiating wiring	HRL 5M (500 cm Length)
9. Digital Multimeter	34461A
10. Testing software-CoreLab	<ul style="list-style-type: none"> <li>&gt; Compatible with Windows XP/7/8/10 OS;</li> <li>&gt; Support of Ethernet interface;</li> <li>&gt; Powerful test sequence function and one-key remote control;</li> <li>&gt; Support of report export and user-defined test report template;</li> <li>&gt; Emergency stop with one key makes operation safe;</li> </ul>