ER-4000 Satellite Navigation Jamming Signal Simulator

Product introduction:

The satellite navigation jamming signal simulator can generate six types of interference signals such as continuous wave interference, sweeping interference, frequency modulation interference, amplitude modulation interference, noise interference and pulse interference, and can provide users with a test environment for the anti-interference performance of the navigation terminal device in the presence of interference .

Features:

- A variety of controllable interference signal types;
- Real-time controllable power and modulation
- Modular design to easily expand the number of interferers;

Function:

- Modular design, the single module can be configured to output one of six kinds of suppressed interference signals such as continuous wave interference, sweeping interference, frequency modulation interference, amplitude modulation interference, noise interference and pulse interference;
- Various parameters such as interference type, interference signal frequency and interference signal strength can be set through the user control interface.
- Configurable up to 4 compressed interferences;
- Can control the interference signal power and modulation;
- Signal output via cable or via antenna.

Optional Configuration:

- External amplifier, output power reachable
- Pressurized interference (except noise)：-150dBm ~ 30dBm
- Noise interference：-150dBm ~ 10dBm

Application field:

Anti-jamming navigation terminal equipment research and development, production, testing, acceptance and inspection.

Performance index:

The output frequency

Frequency range：1160MHz ~ 1280MHz, 1510MHz ~ 1630MHz, 2492MHz ± 20MHz

Resolution：1Hz

External frequency standard：10MHz

Signal quality

Harmonic：<-30dBc

Clutter：<-45dBc

Signal level

Output power：-70dbm ~ 30dBm
Power accuracy：±0.5dB

Signal mode

Continuous wave： Frequency range：1160MHz ~ 1280MHz
1510MHz ~ 1630MHz
2492MHz ± 20MHz

Frequency accuracy：≤ 50Hz
Scan signal： step in：2 ~ 490Hz
Retention time：1ms ~ 60s
FM signal：maximum modulation frequency deviation：20MHz
Sine signal rat： 0.1KHz ~ 50KHz
Square wave signal, ramp signal, triangle signal rate：0.1KHz ~ 10KHz
Modulated signal: sine wave rate：maximum 50KHz
square wave signal, ramp signal, triangular wave signal rate： maximum 10KHz
Noise：bandwidth: 50KHz ~ 20MHz
Pulse：Switching ratio: 80dB, rising and falling: ≤ 120ns
Pulse width：8us ~ 30s, period: 16us ~ 30s
Resolution：4us

External Interface

RF output：N-type head
External clock input：BNC Female, 10MHz
Internal Clock Output：BNC Female, 10.23MHz
Second pulse output：BNC Female, 1PPS
Simultaneous trigger input / output：BNC Female
External control port：Ethernet port
Power Features：AC 220V, 50Hz

Physical properties

Dimensions (wide x height x depth)：478mm×222mm×605mm
Weight：≤25kg

Environmental requirements

Working humidity：10%～75%（22℃）
Working temperature：0 ℃ to + 50 ℃
Storage temperature：- 30 ℃ ~ + 70 ℃
Shock：≤10g/s
Vibration：≤0.2g/100Hz（max）

Reliability

MTBF：≥3000 hours
MTTR：≤2hours

Computer workstation recommendation configuration

Operating system：Windows XP/Windows 7 32bit
Processor：intel @2GHz or higher
External interface：RS232 and gigabit Ethernet ports