

ZN1690B Low-Frequency Large Loop Shielding Effectiveness Testing System - Product Datasheet

Manufacturer: Beijing Daze Technology Co., Ltd.



1. Product Overview

Model: ZN1690B
Type: Low-Frequency Large Loop Shielding Effectiveness Testing System
Components: ZN1690B Low-Frequency Field Generator and ZN1690B Low-Frequency Field Receiver

The ZN1690B Shielding Effectiveness Testing System is designed for qualitative testing of the shielding effectiveness of high-performance shielding rooms and metal plate structures. It is lightweight, portable, and easy to operate, making it ideal for pre-acceptance testing of shielded rooms (such as metal cabins). It can also be used as an auxiliary device for continuous testing by the user.

The system is equipped with long test cables and clips, which allow for easy connection to various materials such as steel plates, aluminum plates, and copper mesh, enabling convenient testing.

2. Technical Specifications

Parameter	Specifications
Operating Environment	-10°C to +40°C, 80% humidity at +40°C
Atmospheric Pressure	650mmHg to 800mmHg
Power Supply	220V, 50Hz (220V ± 10%)
Receiver Frequency	106kHz ± 1%
Attenuator Range	0dB, 20dB, 40dB, 60dB (4 steps)
Attenuator Accuracy	±2dB
Transmitter Output	≥130dB
Battery Life	4 hours continuous operation

3. Key Features

- **Qualitative Testing:** The system provides simple and fast methods for qualitative testing of the shielding effectiveness of shielded rooms or metal cabins.
 - **Portability:** Compact and lightweight design makes it easy to carry for on-site testing.
 - **Wide Application:** Suitable for testing various materials, including steel, aluminum, and copper.
 - **Multiple Testing Methods:** The system can perform tests using the standard large loop around the shielded room or a backup large loop in case some walls are not accessible.
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4. Included Accessories

Item	Quantity
ZN1690B Low-Frequency Field Generator	1 unit
ZN1690B Low-Frequency Field Receiver	1 unit
Test Antenna Probe	1 unit
Test Cables (with clips)	2 units
AA Batteries	4 units
User Manual	1 copy

5. Operating Instructions

1. **Setup:**
 - Connect the signal generator to the test material using the provided test cables.
 - Plug the power supply into a 220V outlet and switch on the generator. The power indicator will light up.
 - Preheat the system for 10 minutes before use.
2. **Testing Procedure:**
 - Place the receiver inside the shielded room or metal cabin.
 - Close all doors and windows, then activate the transmitter.
 - Test various sensitive areas using the receiver probe.
 - Adjust the attenuator switch on the receiver (0dB, 20dB, 40dB, 60dB) based on testing requirements.
 - The receiver displays signal strength, with “FFF” indicating a signal that is too strong and “---” indicating a weak signal.

3. Interpretation of Results:

- At 0dB, if no sound is heard, the shielding effectiveness is approximately 70–80dB.
 - At 20dB, the shielding effectiveness is around 50–60dB.
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6. Warranty

- **Duration:** 18 months from the date of shipment.
- **Conditions:** Covers manufacturing defects and failures under compliant transportation and usage conditions.

7. Product Photo



Contact Information:

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