

ZN1183A Shielding Effectiveness Test System

Datasheet — Beijing Daze Technology Co., Ltd.

Overview

The ZN1183A Shielding Effectiveness (SE) Test System is a fully integrated RF shielding measurement solution designed for chambers, enclosures, panels, and shielding materials. It utilizes frequency-locked signal synthesis and matched transmit/receive antennas to provide accurate and stable shielding effectiveness evaluation over a wide frequency range.

With AC and DC power capabilities and a built-in battery supporting >1 hour field operation, ZN1183A is ideal for both laboratory and on-site compliance testing.

Key Features

- **Wide frequency coverage:** 10 kHz – 18 GHz (expandable to 20 GHz)
- **High frequency stability:** up to 5×10^{-7}
- **Strong signal output:** up to +16 dBm
- **Touch display + intuitive UI**
- **Dual-power modes:** AC mains + internal rechargeable battery
- **Portable design for field measurement**

Technical Specifications

Parameter	Specification
Frequency range	10 kHz – 20 GHz
Frequency stability	5×10^{-4} (10 kHz–25 MHz), 5×10^{-7} (25 MHz–20 GHz)
Frequency accuracy	$\pm1\%$ (10 kHz–1 GHz), $\pm0.01\%$ (1–20 GHz)
Frequency step	1 kHz to 100 MHz step, depending on band
Output level	$\geq +16$ dBm (10 kHz–18 GHz) / $\geq +10$ dBm (18–20 GHz)
Output impedance	50 Ω (N-type)
Display & Control	Color LCD + touch interface
AC Supply	90–240 V, 50/60 Hz
Power consumption	~60 W

Parameter	Specification
DC Operation	Built-in battery, >1 hour
Dimensions	310 × 150 × 380 mm
Weight	~5 kg
Operating temperature	0 °C – 40 °C
Humidity	20–90% RH (40 °C)
Altitude / Pressure	86–106 kPa
Warm-up time	≥10 minutes before measurement

Shielding Effectiveness Test Performance

Measured minimum received level at defined distances:

Frequency	Antenna distance	Rx Level
14 kHz–15 MHz	60 cm	≥100 dBμV
100 MHz–18 GHz	200 cm	≥100 dBμV

Performance based on standardized antenna pairs included with system.

Included Antenna Kit

Matching transmit/receive antenna pairs:

- 14 kHz / 100 kHz / 200 kHz / 1 MHz **loop antennas**
- 15 MHz **loop antenna**
- 100 MHz **dipole** + extra dipole elements
- 450 MHz **dipole elements** (attach to 950 MHz dipole)
- 950 MHz **dipole antenna**
- 1–10 GHz **standard gain horn antenna**
- 10–20 GHz **horn antenna**

Accessories:

- RF low-loss cables (2m & 5m)
- Tripods ×2
- Tape measure + rulers for spacing accuracy
- AC cable, DC battery cable, 2× rechargeable batteries & charger
- User manual

Compliance & Applications

- Shielding enclosures & chambers
 - Material shielding evaluation
 - Automotive EMC (enclosures / harness shielding)
 - Defense and security applications
 - Wireless safety zones
 - EMI protection design validation
-

Warranty

18 months standard warranty

Local technical support & calibration services available

Product Photo



Contact Information:

Beijing Daze Technology Co., Ltd.

Phone: 010-64357789

Fax: 010-64373942

Website: www.zn734.com.cn

Email: 781920339@qq.com