ZN28200 — Interference-Measurement Impedance Matcher

PRODUCT DATASHEET | 9 kHz–30 MHz | ZHINAN

2.2–300 μH adjustable inductance	CAL and OUT ports	Complete calculation chain

1. Product Overview

The ZN28200 provides the adjustable inductive and resistive matching functions used in radio-interference measurements on high-voltage electrical equipment. It supports calibration and measurement configurations with a receiver, reference source, external high-voltage coupling capacitor and blocking impedances.

2. Technical Specifications

Parameter	Specification
Application	Radio-interference measurement on high-voltage electrical equipment
Frequency range	9 kHz–30 MHz
Adjustable inductance	2.2–300 μH
Coupling-capacitor input	External high-voltage capacitor; typically 400–2000 pF
Calibration interface	CAL
Measurement output	OUT
Typical companion instruments	ZN3950C / ZN1062 / ZN28300
Blocking impedances	One each for 500 kHz and 1 MHz
Resistive-network factor BR	21.58 dB when R1 = 50 Ω

3. Typical Applications

• Radio-interference measurement on high-voltage electrical equipment

• Interference-level measurements on transformers, bushings and related apparatus

• Calibration of radio-interference measurement systems

4. Standard Package

Item	Quantity / description
ZN28200 main unit	1
BNC-to-BNC cable, 0.5 m	1
BNC-to-clip cable, 15 m	2
20 kΩ / 2 W resistor	1
ZN28300 blocking impedance, 500 kHz	1
ZN28300 blocking impedance, 1 MHz	1
Fork-to-alligator lead, 0.3 m	2
Fork-to-flat-clip lead, 0.3 m	3
Large flat clip	2
Technical documentation and certificate	1 set

5. Calculation relationships

Item	Value
Circuit attenuation	BC = B2 − B1
Resistive-network attenuation	BR = 20 log10(600 / R1)
For R1 = 50 Ω	BR = 21.58 dB
Interference level	B = Bm + Bc + BR
Voltage conversion	X (μV) = 10^(B / 20)

6. Engineering Notes

• Select the applicable international or project-specific method before configuring the test chain.

Product Image