RF Test Sets

E & H NEAR FIELD PROBES

Model NP-1000A

Features:

- **Broadband Frequency Range**
- **Linear Response**
- **Locates both E and H- Field**
- **Emissions Sources**
- **Specialized Sizes / Shapes for Sensitivity**
- **Includes Free Carrying Case**
- **New Optional Preamplifier for Signal Amplification**

Model NP-1000A Near Field Probe Set with Preamplifier PA-2512

Tenda's Model NP-1000A Probe Set is a passive, near field probe set designed as a diagnostic aid for locating and characterizing sources of E and H-Field emissions.

The set consists of three loop probes, two stub probe, extension RF cable and SMA female -N male adapter, PA-2512 preamplifier, and a foam-lined carrying case with a manual and application note.

The handle of each probe terminates in a SMA connector. Probes are designed to be used with a signal analyzing device such as an oscilloscope or spectrum analyzer. The optional preamplifier is useful when signal amplification is necessary for the analyzing device.

The loop probes are H-Field selective and directional. Sensitivity is relative to loop diameter. For example, the 6 cm loop can be used to make a general survey for H Field emissions, while the smaller diameter loops can isolate specific sources.

The stub probes are E-Field selective and omni-directional. The stub probe is designed for precise E-Field source location, such as signal traces or IC pins.

Typical applications include locating and characterizing emissions from PCB's, IC's, etch runs, cables, cover seams, etc.

Standard Configuration

- **Three loop probes**
- **Two stub probe**
- **One 60 cm extension RF cable**
- **One SMA female-N male adaptor**
- **Manual**
- **Carrying case**

Options

Preamplifier

Tenda's Model PA-2512 preamplifier exhibits excellent gain characteristics across a broadband frequency range of 100 kHz to 3 GHz.

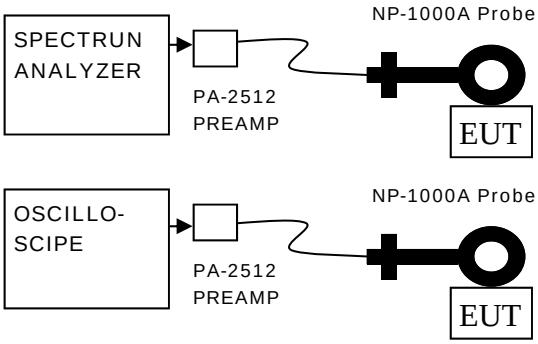
The preamplifier enhances the sensitivity of spectrum analyzers, oscilloscopes and other receivers. The unit is type N connectors and power supply is included (please specify 110 or 220 VAC). Purchase as an option to the Model NP-1000A probe set or as a stand-alone product.

Electrical Characteristics of Probes

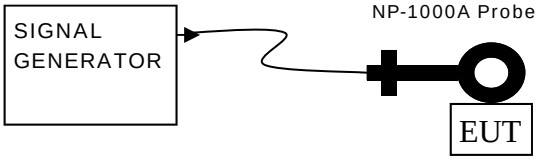
MODEL NP-1000A	PROBE TYPE	PRIMARY SENSOR	UPPER RESONANT	SHAPE
ANT-01A	6.0 cm Loop	H-Field	1.0 GHz	
ANT-02A	2.5 cm Loop	H-Field	2.0 GHz	
ANT-04A	1.0 cm Loop	H-Field	3.0 GHz	
ANT-03A	2.0 mm Stub Tip	E-Field	6.0 GHz	
PR-03A	Metal Pin	E-Field	6.0 GHz	

Loop Probes offer varying sensitivities to H-Field emissions.

Receiving Applications



Radiating Applications



Note: Power input to probe should be limited to a maximum of 0.1 watt to safeguard sensitive circuitry.

Nominal Gain of Optional Preamplifier

MODEL	
PA-2512	
Frequency Range	100kHz~1.2GHz Gain 25dB ± 1.5dB (Typ.)
Frequency Range	1.2GHz~2.0GHz Gain 23dB ± 1.5dB (Typ.)
Frequency Range	2.0GHz~2.5GHz Gain 20dB ± 1.5dB (Typ.)
Noise Figure	3.0dB
Flatness Total Range	± 1.0dB @100kHz~1200MHz
Output Power @ 1dB compression	+7.0dBm @1000MHz
Input Power Max @ No damage	+0dBm
Output Power Max @1dB compression	+3dBm
Impedance	50Ω
Intercept Point	+5dBm
Input VSWR Typical	1.5:1
Output VSWR Typical	2.0:1
Dimensions & Weight	120mm(W) X 90mm(H) X 130mm(D), Approx. 650g.
Power Requirements	100VAC ~ 240VAC
Operating Temp.	-10℃ ~ 60℃
Storage Temp.	-20℃ ~ 70℃