

Broadband Sleeve Antenna

NKU07M32G/NKU2460G

Broadband sleeve antenna has been developed for efficient immunity testing against hand-held transmitters and cellular phones. In the conventional strong electromagnetic field immunity test in the near field, it was necessary to replace the antenna according to each frequency, which required a lot of labor and time. This new Broadband sleeve antenna is a single antenna solution eliminating the need for antenna changes and dramatically reducing the test time. Furthermore, this antenna with its small-size and lightweight properties and a flexible handle is suitable for testing in narrow spaces.

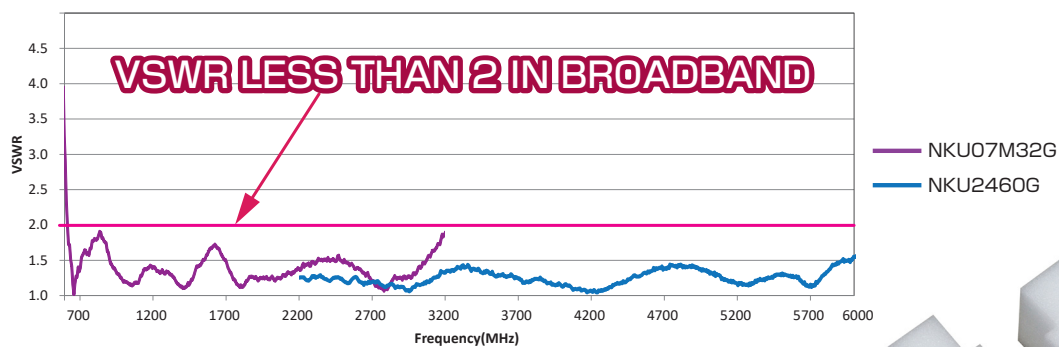
- Compliant to ISO11452-9 Ed.2 (2nd) standard
- A wide frequency range eliminating the need for antenna changes
- 20 W maximum power input allows for strong electromagnetic field testing
- High efficiency due to a low VSWR and high gain
- Suitable for broadband digital modulation thanks to a good VSWR flatness
- Small, light-weight and flat antenna easy to use in narrow spaces
- Since there is little variation in the near-field electric field distribution for each frequency, it is possible to radiate the electromagnetic field to the EUT without changing the position of the antenna.
- A wide radiation pattern makes directivity of the fields no longer an issue



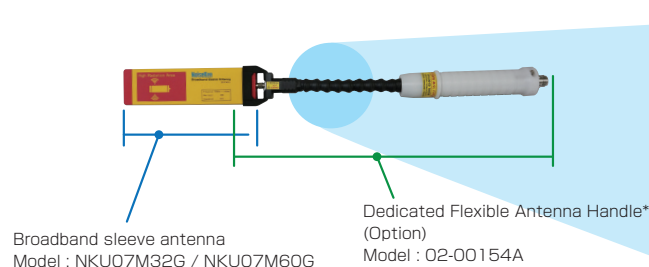
Specifications

Parameter	NKU07M32G specifications	NKU2460G specifications
Frequency range	(660) 700 MHz ~ 3.2 GHz	2.4 GHz ~ 6 GHz
VSWR	≤ 2	
Maximum power input	20 W (continuous) 30 W (continuous up to 10 minutes)	10 W (CW)
Input impedance	50 Ω	
Connector	SMA (J) *antenna part only	
Dimensions	W50mm × D8mm × H186 mm (protrusions excluded)	W35mm × D10mm × H108 mm (protrusions excluded)
Weight	73.5g	20 g

VSWR



Antenna and Dedicated Flexible Antenna Handle



It can be bent freely

Antenna Spacer MODEL : 03-00113A/114A

Antenna Spacer for the Broadband Sleeve Antenna. Equipping it allows the irradiation distance from the EUT to be kept at 50 mm.



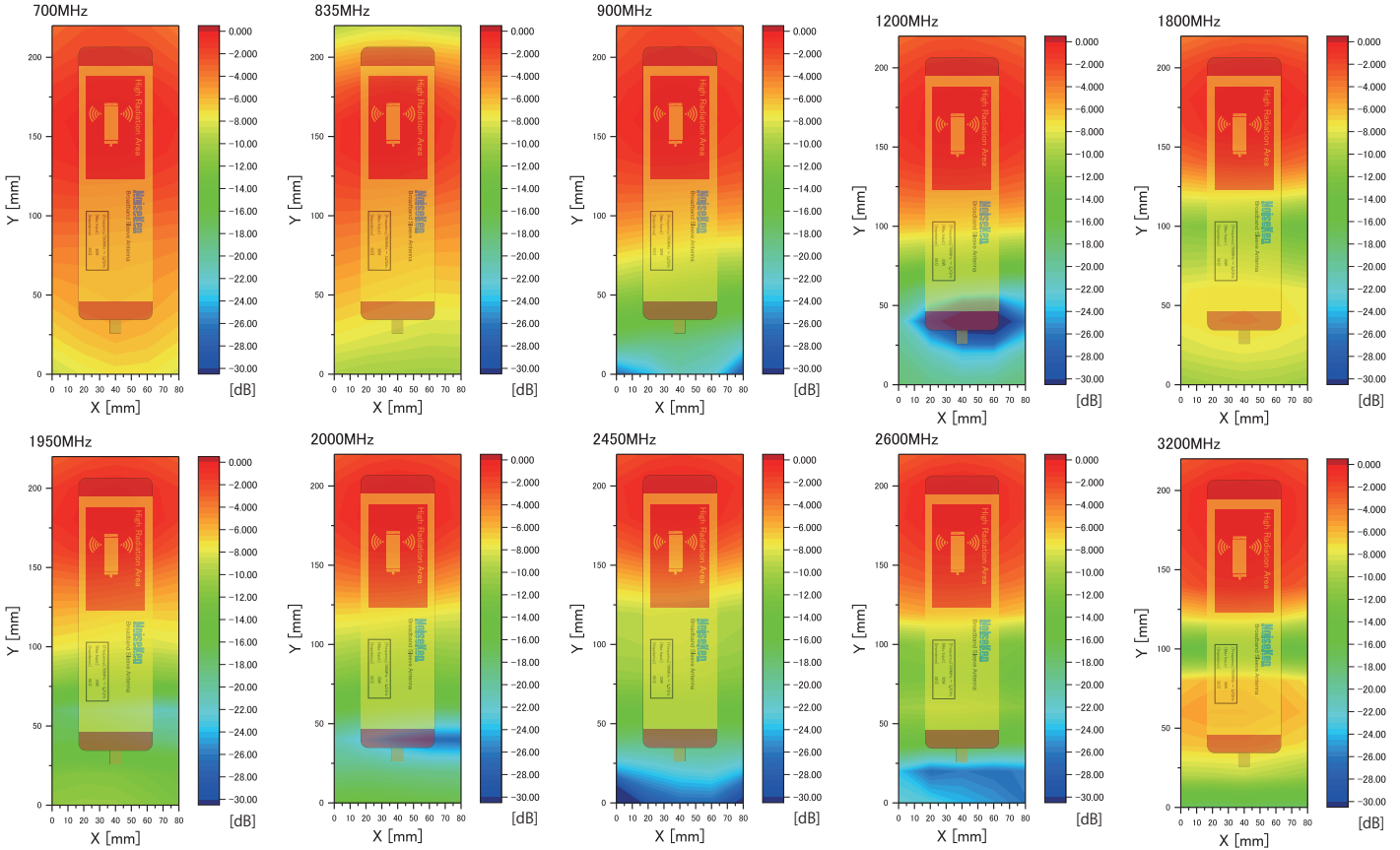
Image of the equipped Antenna Spacer

*02-00154A is a dedicated flexible antenna handle for the NKU series, enables stable measuring reproducibility by incorporating sheath current choke technology to suppress unwanted surface waves.

NKU07M32G / NKU2460G

Specifications

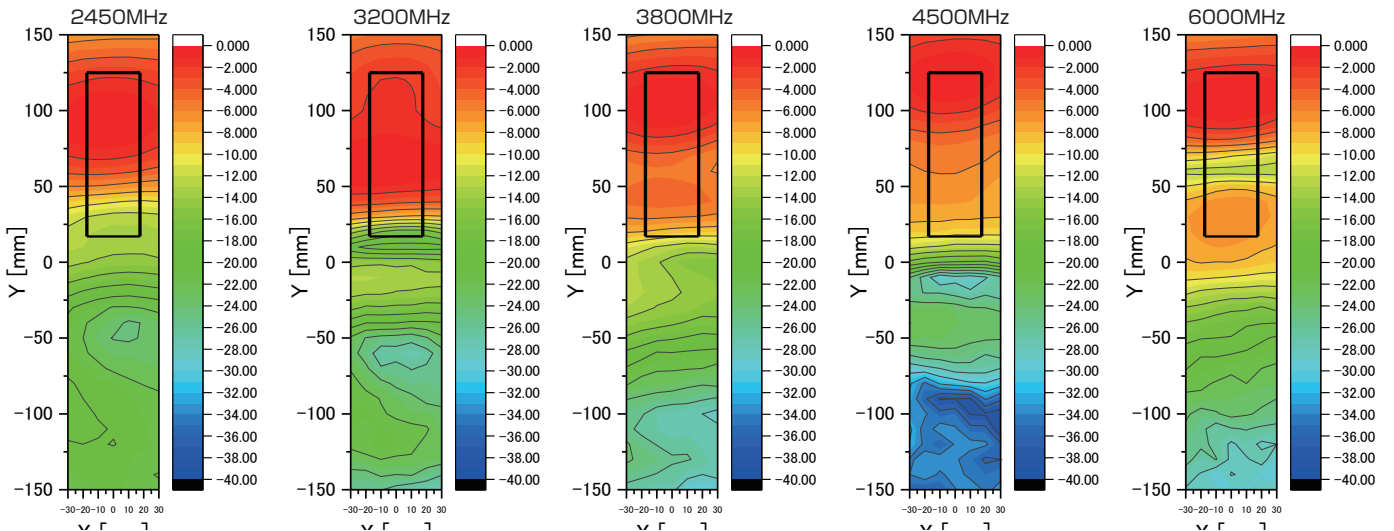
■ Near field distribution characteristics (NKU07M32G)



Electric field direction : y-axis (Single axis)

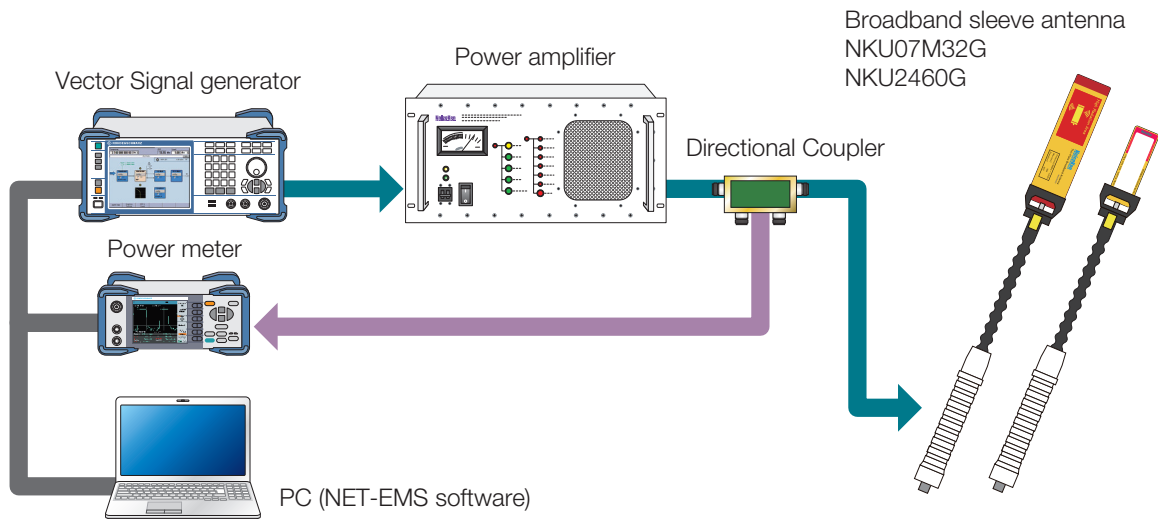
distance : 50mm

■ Near field distribution characteristics (NKU2460G)



NKU07M32G / NKU2460G

System configuration example

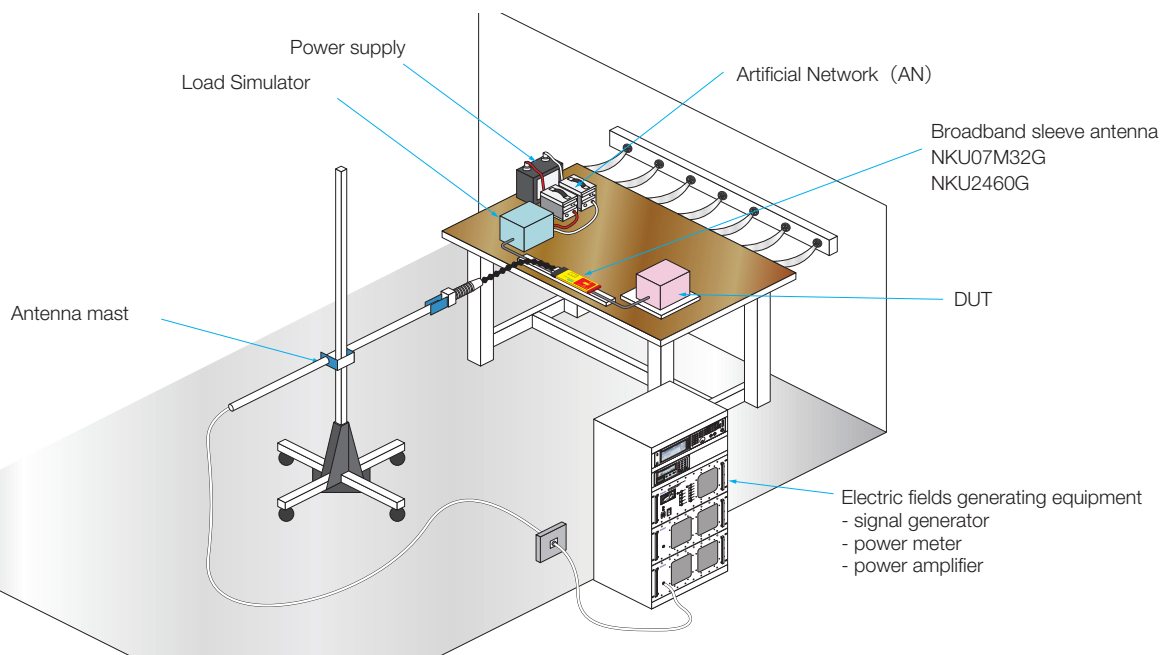


Testing Image

In-vehicle testing



Testing for automotive electronics



NKU07M32G / NKU2460G

CALIBRATION SERVICE AVAILABLE

Calibration services are available for VSWR, electric field distribution and proximity gain characteristics of the Broadband Sleeve Antenna (NKU07M32G, NKU2460G). In ISO 11452-9 standard the calibration of electric field is not specified, and testing level is set in accordance with input power to the transmitting antenna.

The calibration allows to confirm proper functions of the transmitting antenna, which is necessary to ensure the quality of the testing. In addition, the electric field distribution and proximity gain characteristics allow to confirm the position and strength of strong radiation from the Antenna.

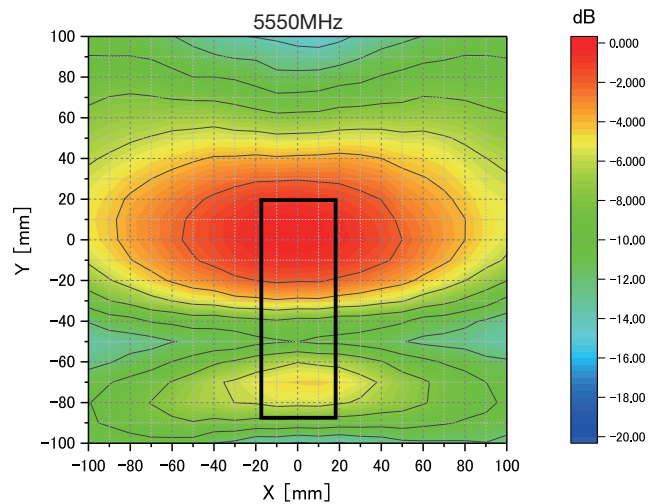
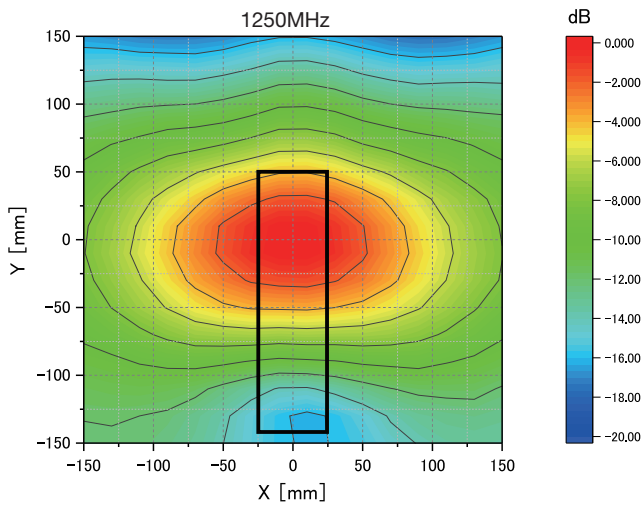


NKU07M32G



NKU2460G

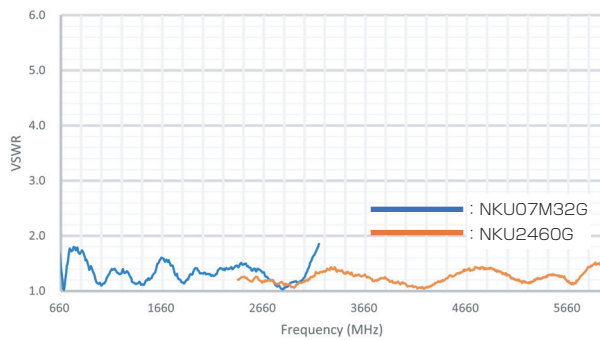
Electric field distribution characteristics image



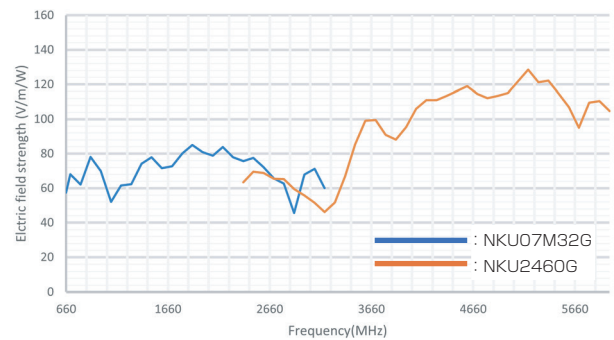
【Distribution map conditions】

- 1-axis electric field ● Measurement distance: 50 mm from the antenna
- Contour line interval : 2dB / Line

VSWR characteristics image



Proximity gain characteristics image



【Proximity gain conditions】

- 1-axis electric field ● Measurement distance: 50 mm from the antenna
- Measurement position coordinates (X : Y): NKU07M32G (0 : 10), NKU2460G (0 : 0) ● Antenna input: 1W