

World Leading High-Accurate Dk/Df Measurement System for Plate Material, 8.2 GHz - 140GHz

Model No. DPS10

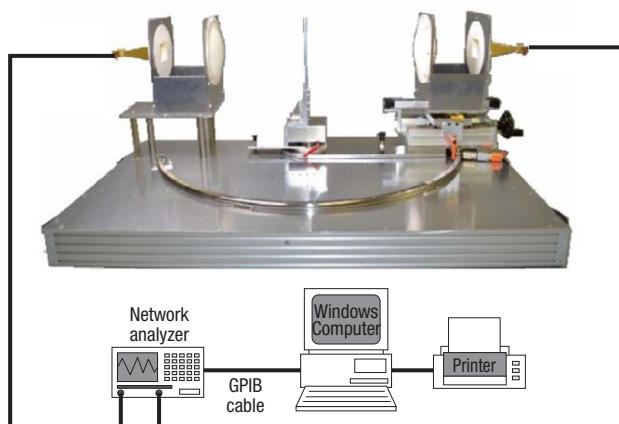
Keysight Technologies and KEYCOM Corp.

Suitable for measurement of emblem, radome, tough and thick materials, metamaterials etc.

This measurement system for permittivity / $\tan\delta$, transmission attenuation amount doesn't need anechoic chamber. Compared with S-parameter method, you just need 0 calibration and can measure specimens accurately including PTFE. Moreover, because there are fewer limitations to prepare specimens, you can easily check anisotropy and homogeneous distribution of materials.

Specimen examples

- Emblem
- Honeycomb materials
- Radome
- Wood
- Resin
- Cement
- Glass
- Metamaterials etc.
- GFRP



Specifications

- Frequency : 8.2-18GHz/18-140GHz
- Permittivity : 1.5 ~ 150
- $\tan\delta$: 0.0001 ~ 20
- Accuracy: $\pm 5\%$ (depending on VNA)
- Specimen size:
 - @18GHz 150mm x 150mm
 - @76.5GHz 100mm x 100m

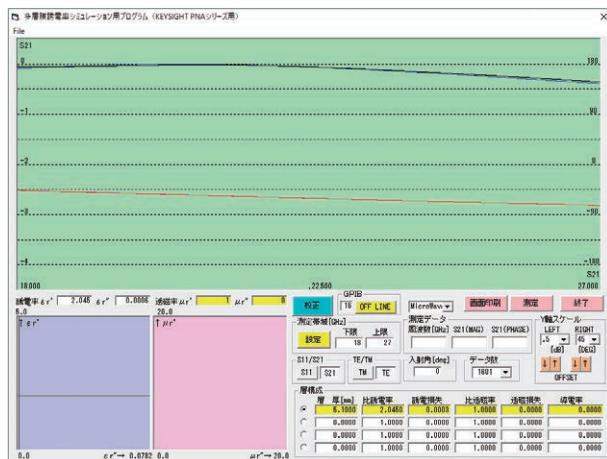
Features

- Accurate measured value
- Simple procedure (0 calibration and measure)
- Easy to check anisotropy of specimens (Most of materials have anisotropy)
- Fewer limitations for specimens and easy to prepare

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Measurement example

Specimen : PTFE
Thickness : 5.1mm
Frequency : Around 20GHz
Result : Permittivity 2.045
 $\tan \delta$ 0.0003



Ordering Information

Keysight Technologies



Vector network analyzer
PNA series (N52xx)
ENA series (E50xx)



Keysight Streamline Series
USB Vector Network Analyzers
(P937xA, P500xA)



E-band
network analyzer system
N5252A

KEYCOM Corp.

System No. DPS10

1. Main body	For 18GHz~140GHz DPS10-01/02 For 8.2GHz~18GHz DPS10-03
2. Antenna (with coaxial converter) 2pcs required	Frequency : 8.2-12.4GHz (WR-90) RH90S19SMA(f7) Frequency : 12.4-18GHz (WR-62) RH62S22SMA(f7) Frequency : 18-26.5GHz (WR-42) RH42S23SMA(f7) Frequency : 33-50GHz (WR-22) RH22R23APC2.4(f7) Frequency : 26.5-40GHz (WR-28) RH28S23SMA(f7)
3. Antenna (with waveguide) 2pcs required	Frequency : 50-75GHz (WR-15) RH15S10 Frequency : 60-90GHz (WR-12) RH12S10 Frequency : 90-110GHz (WR-10) RH10S10 Frequency : 110-140GHz (WR-6) RH06S10
4. Calculation software for Windows	Software for Frequency change method ... DMP-002040619-015/
5. Multilayer plate simulation software for making designs of emblem and radome	Can simulate transmission attenuation amount of multilayer plate (max. 4layers) by using permittivity (ϵ_r') and permeability (μ_r'). Can set angles of incidence, TM and TE wave. It is optimal simulation software for making designs of emblems.....SFW05

Product specifications and descriptions in this document subject to change without notice.

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Characteristic Technologies

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