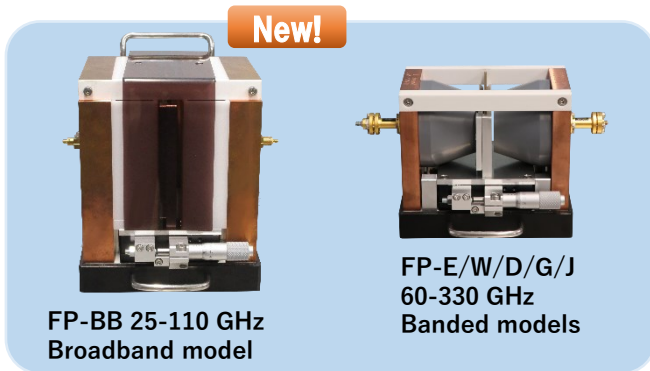


Ideal for mmWave DkDf characterization !

Fabry-Perot resonator for permittivity measurement

FP Series 25 – 330 GHz

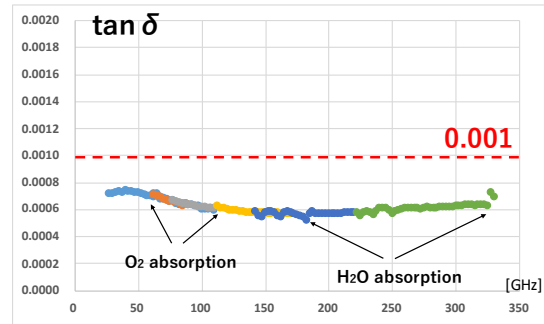
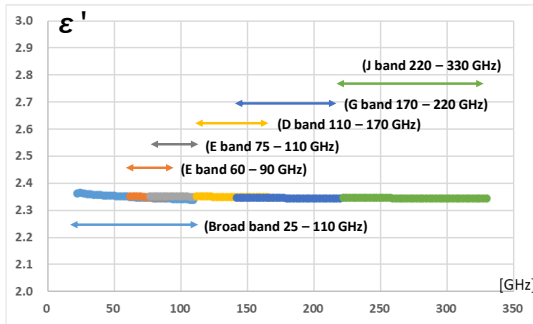


- Ideal for low-loss materials with $\tan \delta$ of 0.01 or less
- Fast sweep measurements with 2.5 GHz step: only 4 sec/point
- Easy to install: Normal lab environment is sufficient

Remarkably simple and repeatable even at 330 GHz

The FP Series is a breakthrough product that allows for easy and accurate evaluation of low-loss dielectric materials up to 330 GHz. Traditionally, the Fabry-Perot resonator has been considered a specialized instrument for a few specialists, but EM Labs has developed a solution that defies conventional wisdom by focusing on ease of use and repeatability in real-world applications.

Test example : COP (186 μ m) @ 25 -330 GHz



Configuration Example

- Keysight PNA mmWave test system (110 GHz) N5290A
- Permittivity measurement software for Fabry-Perot FP-MA
- Fabry-Perot Resonator Broad band (25 – 110 GHz) FP-BB
- 1 mm test cables
- Windows PC

Product Line-up

Model	Description	Res Mode	Q factor	Connectors
FP-BB	Fabry-Perot Resonator broad band (25-110 GHz)	TEM	>100,000	1mm(f)
FP-E	Fabry-Perot Resonator E-band (60-90 GHz)			WR12
FP-W	Fabry-Perot Resonator W-band (75-110 GHz)			WR10
FP-D	Fabry-Perot Resonator D-band (110-170 GHz)			WR 6.5
FP-G	Fabry-Perot Resonator G-band (140-220 GHz)			WR 5.1
FP-J	Fabry-Perot Resonator J-band (220-330 GHz)			WR 3.4

Sample size FP-BB : 70 x 70 mm * More about sample size <https://www.emlabs.jp/en/1-9-sampleprep.php>
 others : 50 x 50 mm