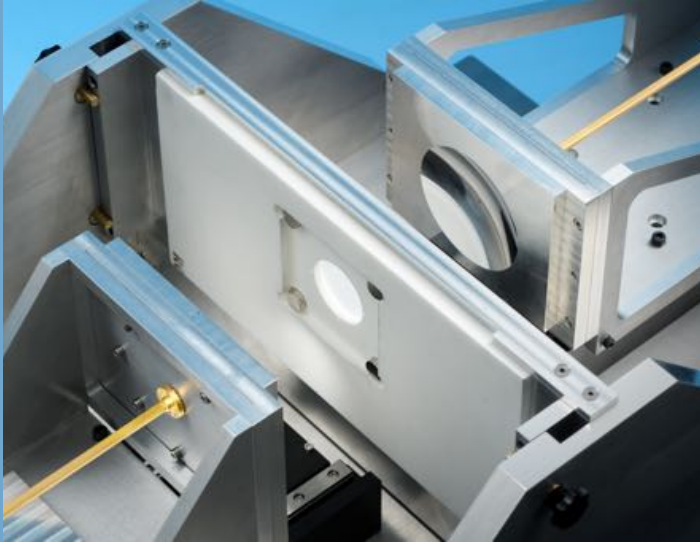


# MATERIAL CHARACTERIZATION SYSTEM

## a fabry-perot open-cavity resonator

The ideal tool to accurately measure dielectric properties of materials. With specially designed mirrors to achieve the highest possible Q-factor in each frequency range, accurate measurements are ensured. The Fabry-Perot open-cavity resonator is available for purchase or as a measurement service including all required facilities.



### SPECIFICATION - MEASURABLE RANGES

- Frequency bands  
26.5 - 40 GHz  
60 - 90 GHz  
90 - 140 GHz
- Relative permittivity 1.05 - 6
- Loss tangent 0.1 - 0.001
- Sample size 80x80 - 300x300 mm
- Sample thickness 0.05 - 2 mm

### MATERIAL CHARACTERIZATION METHOD

- To improve and verify the accuracy of the obtained relative permittivity, this system measures at various focal distances.

### INCLUDED TOOLS

- Computer with software to control mirror positions and to control a VNA
- Software to obtain relative permittivity and loss tangent

### OPTIONAL

- Mirrors for different frequency bands
- Thickness measurement system
- Waveguide and cables
- VNA
- Frequency extenders
- Alignment calibration kit
- Custom solutions

