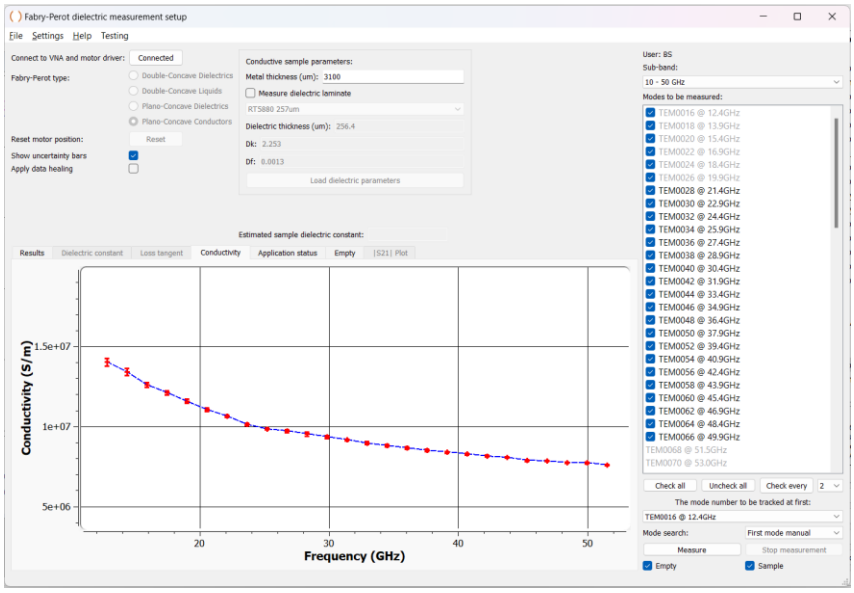
FABRY-PEROT OPEN RESONATOR CONDUCTIVITY (12-50 GHz)

Plano-concave Fabry-Perot open resonator (FPOR) is dedicated to automated broadband accurate measurements of **conductive sheets** in the **12-50 GHz** range. The FPOR software controls the measurement process and extracts the **electric conductivity** of the material under test from the measured quality factor of consecutive $TEM_{0,0,q}$ Gaussian modes spaced every **1.5 GHz**. The results are presented with the **uncertainty bars**.

The system is dedicated to the measurement of bulk samples (e.g. silver, copper, brass, aluminium, stainless steel), conductive foils (e.g. copper), and copper clad laminates (CCL). Due to the use of advanced algorithms ensuring automatic mode identification, the measurement is easy and robust, whereas the total measurement time is the matter of **a few minutes** only.

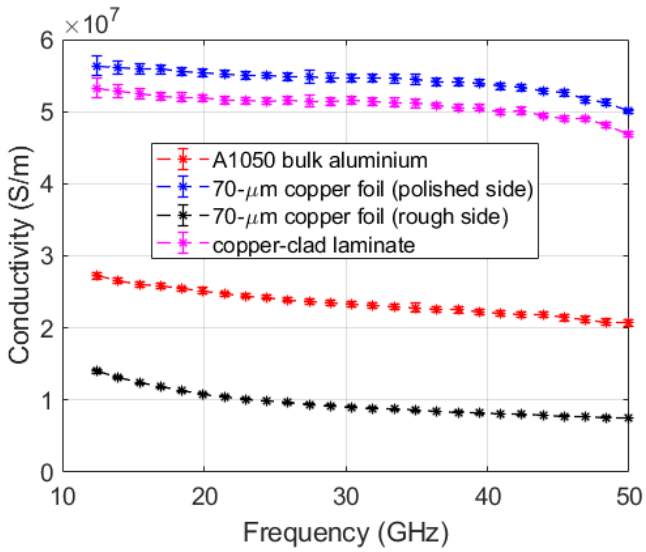
Fabry-Perot Open Resonator



Measurement software

The system allows measuring conductive samples with the following properties:

- **conductivity**: 5×10^4 - 6×10^7 S/m (accuracy: <5%)
- **thickness**: at least 5 skin depths (e.g. a few microns for copper)
- **diameter**: 150 mm – 195 mm



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