



## MATCHING NETWORK OPTIMIZATION

Ensure the best antenna performance is achieved for every specific device.

If the customer device already contains pads for a matching network, Fractus Antennas performs the following tasks:

### Set-up

The device is prepared with a transmission line and a SMA connector to access to the antenna and the pads area.

### Passive Measurements

The reflection coefficient and the total efficiency are provided. Please note that all measurements are performed considering all the available mechanical parts (populated PCB, battery, LCD, cover, etc...)

### Report

- A report is issued with the following information:
- Set-up explanation plus pictures.
- Recommended matching network configuration and topology.
- VSWR (Voltage Standing Wave Ratio) measurement before and after the matching service.
- Efficiency measurement before and after the matching service.
- Radiation Patterns: 3 cuts (planes XY, YZ and XZ).
- Summary, conclusions, and design recommendations.

### Phantom Head/Hand

To take into account the body effect, measurements with a phantom head/hand can be performed under request.

To request a quotation for a matching network service please contact [support@fractusantennas.com](mailto:support@fractusantennas.com) or visit our [R&D Services section](#) on our website.