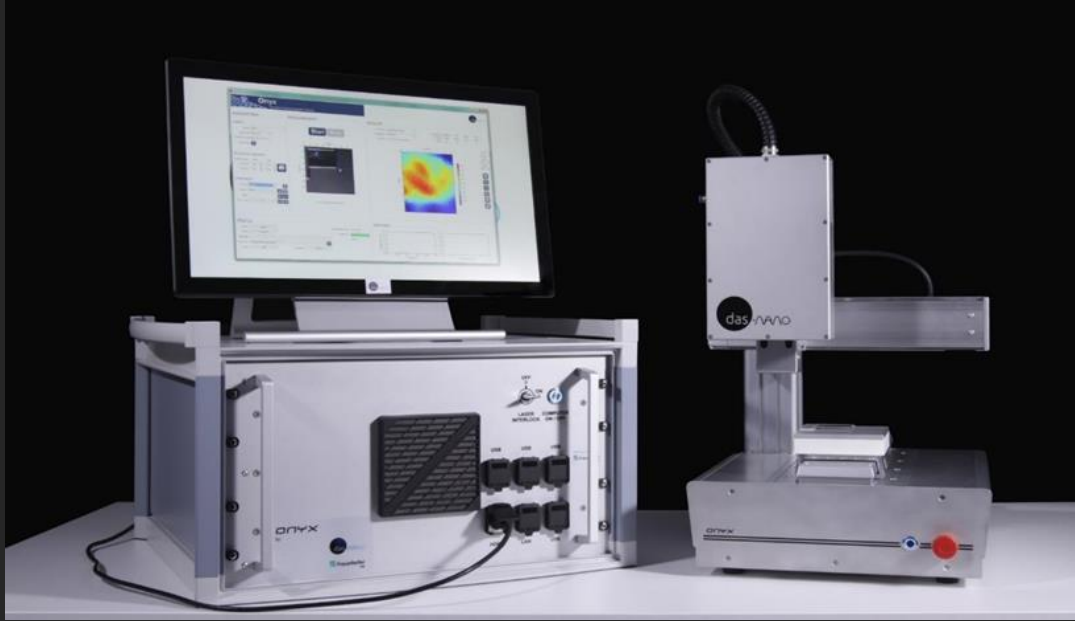
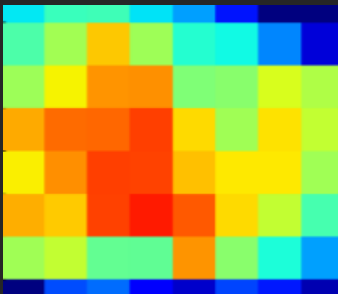


Wafer Scale Electrical Characterization



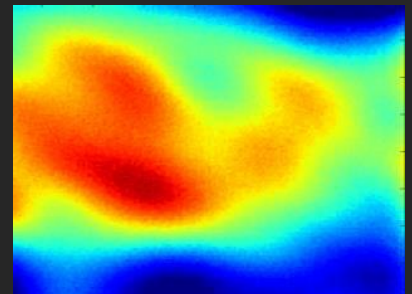
- Full Conductance/Resistance analysis
- Mobility and carrier density analysis
- Full sample inspection (100% area)
- Quality control of wide range of materials
- Non-destructive analysis
- No need for sample preparation
- Customizable inspection area (up to m^2)
- Ultra-Fast – $6\text{ cm}^2/\text{min}$
- Automated
- Co- developed with *Fraunhofer Institute*
- Friendly user interface – no qualification required

10x10mm sample of CVD Monolayer Graphene. Conductance Map.



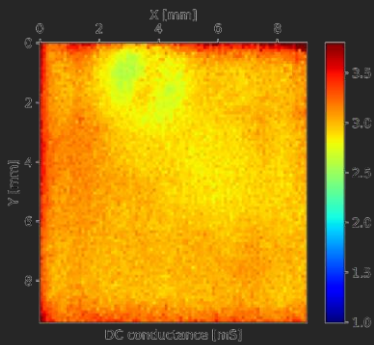
Left- $1000\ \mu\text{m}$ resolution. (2 seconds)
Right - $50\ \mu\text{m}$ resolution. (15 min)

Complete and meaningful information is obtained even at the lowest resolution.

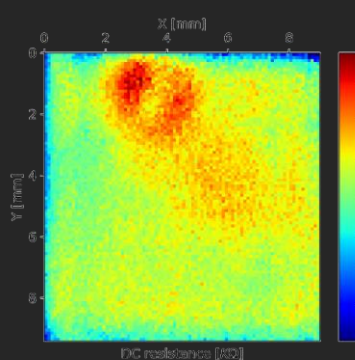


Graphene & 2D Materials Characterization

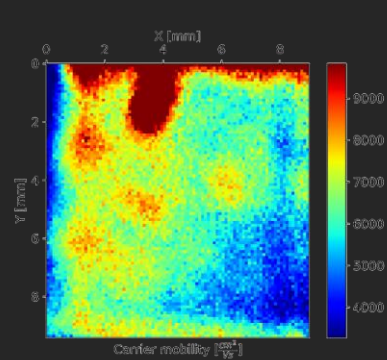
Using cutting-edge technologies like THz radiation and highly sophisticated software **Onyx** is able to inspect and characterize full-area samples offering different physical parameters showing a spatial distribution of the quality of the sample.



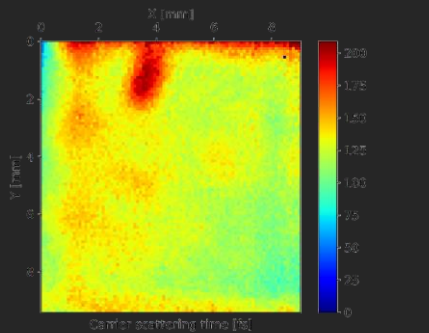
DC conductance, σ_{DC}



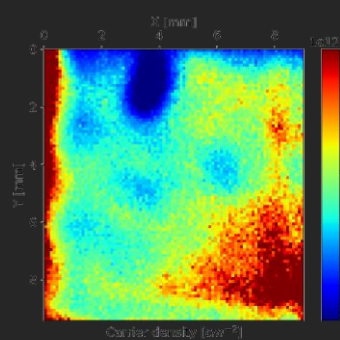
DC resistance, R_{DC}



Carrier mobility, μ_{drift}



Carrier scattering time, τ_{sc}



Carrier density, N_s

Tested with:

Graphene:

- Multi-layer
- Inks
- Doped
- Epitaxial over SiC
- Powder & Flakes
- Graphene Oxide

Other 2D materials:

- PEDOT
- Carbon Nanotubes
- ITO
- NbC
- IZO
- ALD- ZnO
- GaN
- MoS