

GEOLUX

Geolux is a high-tech company that develops and produces radar sensors for hydrology, security and industrial applications.



“SIMULIA CST Studio Suite enables fast design and complex scanning with very narrow beam width in very small physical dimension radars.”

— Tomislav Grubeša, CEO, Geolux

Challenge

Geolux needed a way to design complex 3D models of their scanning array antenna and microwave frontend for hydrology and security radars with very small dimensions. In order to do this, they had to optimize the board design, the 3D printed lenses, and the mechanical design of the sensors.

Solution

Geolux uses SIMULIA CST Studio Suite for its simulation and parametric optimization capabilities enabling a wide range of design parameters on large electrical structures.

Benefits

Using electromagnetic simulation and parametric optimization functionalities from SIMULIA CST Studio Suite, the company reduced the development time needed for complex projects and improved the quality of its sophisticated radar systems. The testing phase for physical products and their time-to-market has been significantly shortened as a result.