

SE-Workbench-RF: Radio-Frequency software package description

The SE-Workbench-RF solution allows the experimented users to work with the advanced technology of the OKTAL-SE software.

Radar signal, RCS computation, narrow beam approximation SAR images and RF field propagation are computed using ray-tracing technology implementing asymptotic methods.



Import capabilities are provided in order to work on existing 3D terrain databases or 3D objects (geometry & texture). A plug-in to 3DSmax™ and SketchUp™ is delivered. Advanced functions are provided to work on 3D objects and to enhance the database of physical materials.

SE-Workbench-RF gives a direct access to:

- EM field computation in 3D
- The response of the 3D scene (Amplitude and Phase) at the receivers locations.
- RCS computation in monostatic and multistatic configurations
- Narrow Beam SAR image computation

The Application Programming Interface (API) enables to integrate the computation process in a customer application.

SE-Workbench-RF includes 3D objects samples, a set of physical materials, the User Manuals, the format documentation and a full description of the implemented Physical Models.

SE-Workbench-RF solution is delivered for  (Windows™) operating system (also compatible with Linux system ) in its English version. A USB dongle controls the license.

The SE-Workbench-RF solution can be covered by a support and maintenance contract.

SE-Workbench-RF

Synthetic environment modeling:

Import capability:

SE-FFT

SE-PHYSICAL-EDITOR

+library of RF physical materials

+library of RF generic textures

Airport and sample of rural database

samples of 3D objects

3D terrain:

3D objects:

Integration and signal rendering:

Scenario edition:

SE-SCENARIO

Advanced RF computation:

SE-RAY-EM

Target analysis:

SE-RAY-NBSAR

Signal visualization:

SE-SIGNAL-VIEWER

SE-RAY-RCS

Software integration:

SE-TOOLKIT

Signal manipulation:

SE-TK-FORM-SPS

Documentation:

Software:

User Manuals

Format description

Integration developer manual

Physical Models:

Physical Models documentation

Validation Dossier documentation

Tutorials:

SE-TOOLKIT tutorials

SE-TK-FORM-SPS tutorial