

SE-Workbench-EO: Electro-Optics software package description



The SE-Workbench-EO solution allows experimented users to work with the advanced technology of the OKTAL-SE software. Infrared images, including generic sensor effects, can be generated using ray-tracing methods (non-real time advanced rendering) or GPU technology (real time fast rendering).

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. The user is able to assign physical materials to geometries via textures from a provided library of physical data. Advanced tools are provided to work on 3D objects and to enhance the set of physical materials.

Various atmospheric conditions can be computed. The thermal state of existing 3D environments can be predicted.

The Application Programming Interface (API), based on a static scenario definition, enables to connect the image rendering process (both for “advanced” and “fast”) to a customer application.

The documentation package includes the User Manuals, the internal Format description, the Developer Manual as well as Physical Models documentation and Tutorials.

This edition is delivered for  (Windows™) operating system (also compatible with Linux system ) in its English version. A USB dongle controls the license.

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

SE-Workbench-EO

Synthetic environment modeling:

Import capability:

SE-FFT
SE-PHYSICAL-EDITOR

+library of EO generic textures
+library of EO physical materials
Airport and sample of rural database
samples of 3D objects

3D terrain:

3D objects:

Atmospheric modeling:

Thermal state modeling:

SE-ATMOSPHERE + library of .atm files
SE-THERMAL + library of thermal files

Integration and signal rendering:

Scenario edition:

Fast time rendering:

Advanced rendering:

Sensor modeling:

Signal visualization:

SE-SCENARIO
SE-FAST-IR
SE-RAY-IR
SE-IR-SENSOR
SE-SIGNAL-VIEWER

Software integration:

Signal manipulation:

SE-TOOLKIT
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-IR-SENSOR tutorials
SE-TK-FORM-SPS tutorial