











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

ADVANCED EDITION

The ADVANCED EDITION of the SE-Workbench-EO solution enables 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 graphic board technology (real time fast rendering). Import capabilities are provided in order to use existing 3D terrain databases or 3D objects (geometry & texture). 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 enhance the set of physical material. Different atmospheric conditions can be computed. The thermal state of existing 3D environments can be predicted. The Application Programming Interface, 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 delivered with the ADVANCED EDITION includes the User Manuals, the internal Format description, the Developer Manual as well as the Physical Models documentation and Tutorials.

SE-Workbench-EO ADVANCED EDITION	
Synthetic environment modeling:	
Import capability:	 SE-FFT  SE-CLASSIFICATION  SE-PHYSICAL-MODELER <i>samples: urban, rural and desert</i>
3D terrain:	<i>samples of 3D objects</i>
3D objects:	
Atmospheric modeling:	 SE-ATMOSPHERE
Thermal state modeling:	 SE-THERMAL
Integration and signal rendering:	
Scenario edition:	 SE-SCENARIO
Software integration:	 SE-TOOLKIT
Fast time rendering:	 SE-FAST-IR
Advanced rendering:	 SE-RAY-IR
Additional library:	 SE-IR-SENSOR
Documentation:	
Software:	User Manuals Format description Integration developer manual
Physical Models:	Physical Models documentation Validation Dossier documentation
Tutorial:	SE-TOOLKIT tutorial SE-IR-SENSOR tutorial