



## **TOPS**

Your one-stop-shop  
for physics-based simulation



**TOPS** is a cutting-edge, real-time photo-realistic and fully validated physics-based spectral 3D engine designed for simulation & training, engineering and Hardware In the Loop (HWIL) applications.

**TOPS** renders real world, unlimited in size, complex environments scenarios of all type of sensors (visual, infrared, thermal, multispectral and hyperspectral) with high fidelity and immersive realism.

## TOPS Features and Capabilities



### Applications

- Space, air, land and maritime simulation & training
- Engineering simulation
- HWIL/SIL
- Multi/Hyper spectral simulations



### Environment

- Land, maritime, air and space environments
- VR & AR



### Open and Customizable

- SDK
- OGC Compliant
- User data – radiance and temperature maps, materials, atmosphere models and custom sensors



### Seamless Integration

- Runs on COTS PC
- Standard formats



### Dynamic Physics-Based IR & Sensor Simulation

- Time dependent IR shadow
- Real time atmospheric influences (Modtran)
- Weather & special effects
- Location & time dependant simulation



### Operational and Proven

- Installed at dozens of worldwide customer systems and applications



### The Most Comprehensive Suite

- Data production tools, non-coding
- Calibrations tools
- Customer support package



### Extensive Library

- 250+ material library
- Terrains
- 3D models

## About Tiltan

**Tiltan Software Engineering Ltd.** is a leading solution provider specializing in Simulation, 3D Engines, Generative AI Training, Geo-Systems, 3D Content, and Operation Center Systems and Tools.

With over 30 years of experience, Tiltan's simulation products provide a one-stop-shop solution for training, development, and hardware-in-the-loop systems, powered by a proprietary 3D engine and Generative AI.

Our Geo-System products support space, aerial, manned, and unmanned vehicles, addressing registration, localization, and navigation challenges, as well as geo-mapping systems.

Tiltan's in-house content production delivers high-fidelity, geo-specific visual databases, 3D models, and mapping data for VIS, IR, LIDAR, and SAR applications.

Tiltan is driven by a commitment to customer success, excellence, and innovation, ensuring our solutions meet the highest standards of performance and reliability.

