



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.

