

SOLIDWORKS VISUALIZE

PRODUCT MATRIX



	VISUALIZE STANDARD	VISUALIZE PROFESSIONAL
RENDERING		
Hardware agnostic, unbiased, Interactive wyslwyg pathtracing using NVIDIA Iray (Accurate Mode)	✓	✓
Hardware agnostic, biased, Interactive wyslwyg raytracing using NVIDIA Iray (Fast Mode)	✓	✓
Hardware agnostic, high quality, Interactive wyslwyg rasterizer (Preview Mode)	✓	✓
Supported techniques such as global Illumination, ambient occlusion, screenspace shadows, IBL, color bleeding, dispersive caustics, unlimited raybounces, refraction, rough reflections and more.	✓	✓
Automatic "Blending" between rendering modes	✓	✓
HDRI lighting	✓	✓
Light emission from geometry	✓	✓
Ground reflectivity and roughness	✓	✓
Visualize Boost network rendering (offline) One seat Included with Visualize Professional		✓
Visualize PowerBoost streaming raytracing live to Viewport (realtime)		✓
Rasterized baked lighting		✓
Rasterized accumulation		✓
INPUT		
Solidworks (SLDPRT /SDLASM)	✓	✓
Autodesk Alias (WIRE)	✓	✓
3D PDF	✓	✓
3DXML	✓	✓
ACIS(SAT)	✓	✓
IGES	✓	✓
STEP	✓	✓
STL	✓	✓
Collada (DAE)	✓	✓
PTC Crea / Pro/E / NX (PRT, ASM)	✓	✓
Autodesk FBX Scene (FBX)	✓	✓
Animated Autodesk FBX Scene (FBX)		✓
Autodesk 3D Studio Max (3DS)	✓	✓
Rhino (3DM)	✓	✓

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INPUT		
Wavefront (OBJ)	✓	✓
SketchUp (SKP)	✓	✓
Maya (MB)	✓	✓
Solid Edge (ASM, PAR, PSM)	✓	✓
Autodesk (DWG/DXF)	✓	✓
Inventor (IPT/IAM)	✓	✓
CATIA V4 (MODEL, EXP, SESSION)	✓	✓
CATIA V5N6 (CATpart, CATproduct, CGR) ICEM	✓	✓
Universal 3D (U3D)	✓	✓
Parasolids	✓	✓
JT	✓	✓
NX	✓	✓
VDA-FS	✓	✓
Live Update from CAD	✓	✓
OUTPUT		
Unlimited resolution offline rendering	✓	✓
Alpha Channel	✓	✓
Early Image save	✓	✓
Threaded offline renderings	✓	✓
JPG, BMP, PNG, TIFF, HDR and PSD output Built In Image viewer tab	✓	✓
Render Profiles	✓	✓
Preview (raster) output	✓	✓
Render all Cameras	✓	✓
Render all Configurations		✓
Render Passes		✓
Turntable rendering		✓
Automatic movie (.mp4, .mkv, .flv) output		✓
Browser based VR output		✓
Browser based Panoramic output		✓

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	VISUALIZE STANDARD	VISUALIZE PROFESSIONAL
SCENE PREPARATION		
CAD Live-Update	✓	✓
Auto-Paint	✓	✓
Direct manipulation of parts	✓	✓
Surface/Part Splitter	✓	✓
Cut Planes of objects (multiple)	✓	✓
Control object opacity per part/model/group	✓	✓
Group and reorganize parts In the tree view	✓	✓
Model/Part reset and freeze	✓	✓
Automatic pivot point snapping	✓	✓
Formation tool		✓
Part re-tessellation		✓
Multiple model sets		✓
Simple vehicle wheel building		✓
ANIMATION		
Import SOLIDWORKS CAD Motion Studies (Geometry, Camera, Appearance) Proprietary		✓
“3D graph editor” Ribbon		✓
Turntable Animations		✓
Sun Study Animations		✓
Keyframe animations of Models, Groups and Parts		✓
Keyframe animation of Materials		✓
Keyframe animation of cameras		✓
Keyframe animation of Environments		✓
Keyframe animation of Lights		✓
Keyframe animation of Cut Planes		✓
Keyframe animation of object opacity (fading object transparency)		✓
RealTime turntable		✓

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	VISUALIZE STANDARD	VISUALIZE PROFESSIONAL
MATERIALS		
Scientifically accurate preset and adjustable materials	✓	✓
Supported techniques such as fresnel reflections, absorption, transmittance, anisotropy (mappable), emission.	✓	✓
Color/texture, opacity, specular, anisotropic, bump and normal mapping	✓	✓
Advanced materials: Subsurface, Thin Film, Backscatter	✓	✓
Flexible local or cloud based asset storage	✓	✓
Sharable material definition files (.svap)	✓	✓
Drag and drop materials/textures from desktop or any folder	✓	✓
Unique In and out of app color picker/dropper	✓	✓
Save favorite colors	✓	✓
Texturable and paintable decals	✓	✓
Layered decals	✓	✓
Decal projection	✓	✓
Controllable decal depth	✓	✓
Multiple part decals	✓	✓
LIGHTING		
Lighting, shadow and reflection casting from HORI	✓	✓
High Dynamic Range Image (HORI) Interaction and control	✓	✓
HOR Light Studio compatible	✓	✓
Prop creation for additional light sources	✓	✓
Time of day (Sun and Sky) lighting model		✓
Photometric lights (Point, Spot and Directional)		✓
Raster object reflections (Preview Mode)		✓
Raster culling (Preview Mode)		✓

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CAMERA OPTICS		
F-stop, Focal length, Field of view and Perspective settings	✓	✓
Exchangeable camera flies (.svcm)	✓	✓
Interactive depth of field with focal point selection	✓	✓
Multiple cameras with individual aspect ratio and settings	✓	✓
SOLIDWORKS CAD camera navigation	✓	✓
Orthographic camera	✓	✓
Walk-around camera	✓	✓
Rule of thirds overlay	✓	✓
Preset photographic camera filters	✓	✓
Real world camera positioning	✓	✓
Real-time customizable photographic camera filters		✓
Follow and aim cameras and objects		✓
Motion blur		✓
Region rendering		✓
FBX camera export		✓
PRODUCTIVITY		
Highly optimized parallel architecture	✓	✓
Hybrid Based CPU and GPU rendering	✓	✓
Near Linear performance scaling with added CPU's and GPU's	✓	✓
3D Connexion device support	✓	✓
Context sensitive Help Menu	✓	✓
SOLIDWORKS Visualize cloud community connection	✓	✓
Visualize Boost network rendering (off line)One seat Included with Visualize Professional	✓	✓
Visualize PowerBoost streaming ray tracing live to Viewport (realtime)	✓	✓
Queue rendering manager		✓
Configurations		✓
Multiple viewports (Dual, Quad and Orthographic)		✓
Presentation Mode with customizable Toolbar		✓