SOLIDWORKS VISUALIZE PRODUCT MATRIX	VISUALIZE PROFESSIONAL	VISUALIZE STANDARD
RENDERING		
Hardware agnostic, unbiased, interactive wysiwyg pathtracing using NVIDIA iray (Accurate Mode)	•	•
Hardware agnostic, biased, interactive wysiwyg raytracing using NVIDIA iray (Fast Mode)	•	•
Hardware agnostic, high quality, interactive wysiwyg 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 Creo / Pro/E / NX (PRT, ASM)	•	•
Autodesk FBX Scene (FBX)	•	•
Animated Autodesk FBX Scene (FBX)	•	
Autodesk 3D Studio Max (3DS)	•	•



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Rhino (3DM)	•	•
Wavefront (OBJ)	•	•
SketchUp (SKP)	•	•
Maya (MB)	•	•
SolidEdge (ASM, PAR, PSM)	•	•
Autodesk (DWG/DXF)	•	•
Inventor (IPT/IAM)	•	•
CATIA V4 (MODEL, EXP, SESSION)	•	•
CATIA V5/V6 (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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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	•	
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	•	•



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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 HDRI	•	•
High Dynamic Range Image (HDRI) interaction and control	•	•
HDR 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)	•	
CAMERA OPTICS		
F-Stop, Focal length, Field of view and Perspective settings	•	•
Exchangeable camera files (.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	•	





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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 (offline)One seat included with Visualize Professional	•	•
Visualize PowerBoost streaming raytracing live to Viewport (realtime)	•	•
Queue rendering manager	•	
Configurations	•	
Multiple viewports (Dual, Quad and Orthographic)	•	
Presentation Mode with customizable Toolbar	•	