

SOLIDWORKS Visualize Product Matrix

The table below details the feature differences between SOLIDWORKS Visualize products.

	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	✓	✓
Rasterized baked lighting	✓	
Rasterized accumulation	✓	
Input		
SOLIDWORKS (SLDPRT/SDLASM)	✓	✓
Alias (WIRE)	✓	✓
3D PDF	✓	✓
3DXML	✓	✓
ACIS (SAT)	✓	✓
IGES	✓	✓
STEP	✓	✓
Collada (DAE)	✓	✓
Pro/E / Creo (PRT)	✓	✓
Filmbox (FBX)	✓	✓
Animated Filmbox (FBX)	✓	

	Visualize Professional	Visualize Standard
3D Studio Max (3DS)	✓	✓
Rhino (3DM)	✓	✓
Wavefront (OBJ)	✓	✓
SketchUp (SKP)	✓	✓
Maya (MB)	✓	✓
SolidEdge (ASM/PAR)	✓	✓
Autodesk (DWG/DXF)	✓	✓
Inventor (IPT/IAM)	✓	✓
CATIA	✓	✓
ICEM	✓	✓
U3D (Unigraphics)	✓	✓
Parasolids	✓	✓
NX	✓	✓
VDA	✓	✓
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 Configurations	✓	
Render all Cameras	✓	
Render Passes	✓	
Turntable rendering	✓	
Automatic movie (.mp4, .mkv, .flv) output	✓	
Browser based VR output	✓	
Browser based Panoramic output	✓	

	Visualize Professional	Visualize Standard
--	---------------------------	-----------------------

Scene Preparation

CAD Live-Update	✓	✓
Auto-Paint	✓	✓
Direct manipulation of parts	✓	✓
Surface/Part Splitter	✓	✓
Group and reorganize parts in the tree view	✓	✓
Model/Part reset and freeze	✓	✓
Formation tool	✓	
Part re-tessellation	✓	
Multiple model sets	✓	
Simple vehicle wheel building	✓	

Animation

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	✓	
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	✓	✓
Advanced materials: Subsurface, Thin Film, Backscatter	✓	✓
Flexible local or cloud based asset storage	✓	✓
Sharable material definition files (.svap)	✓	✓

	Visualize Professional	Visualize Standard
--	---------------------------	-----------------------

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	✓	✓
Displacement Mapping	✓	✓

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	✓	✓
Orthographic camera	✓	✓
Walk-around camera	✓	✓
Rule of thirds overlay	✓	✓
Preset photographic camera filters	✓	✓
Real-time customizable photographic camera filters	✓	
Follow and aim cameras and objects	✓	
Real world camera positioning	✓	
Motion blur	✓	

Visualize
Professional

Visualize
Standard

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
SOLIDWORKS Visualize cloud community connection
Queue rendering manager
Configurations
Multiple viewports (Dual, Quad and Orthographic)

