

Technical Specifications



zSpace, Inc., is the world's only leading-edge technology provider that enables unique natural interaction with virtual-holographic 3D imagery through its one-of-a-kind product, zSpace®. Targeting markets including manufacturing, biotechnology, architecture, engineering, government, medical and research, zSpace accelerates understanding and increases productivity in ways not possible with other technology.

Only when using zSpace's proprietary stereoscopic display, trackable eyewear, direct interaction stylus and innovative software platform, will 3D objects appear "solid" in open space, with full color and high resolution, allowing users the unique ability to navigate, grab, zoom, and explore 3D models as never before possible.

Be on the forefront of a major shift in human-computer interaction. This is neither what you've seen before, nor what you think it will be and is only available on zSpace.

Display

Size	23.6 inch (diagonal)	Connectors	<ul style="list-style-type: none"> • DVI-D Dual Link • Display Port (1.2) • USB Device (to host) • Stylus • DC Power (12 V)
Resolution	1920x1080 full HD	Included Cables	<ul style="list-style-type: none"> • USB Device to computer • DVI-D male to DVI-D male • Power-3m, black
Aspect Ratio	16:9	Stand	The display is fixed at 30 degrees
Response Time	Full off to full on rise time <= 2.5 ms, 10% to 90% Full on to full off fall time <= 5.5 ms, 50% to 10%	Operating Environment	<ul style="list-style-type: none"> • Temperature: 10-40 degrees C (50-104 degrees F) • Humidity: 10-80% non-condensing
Pixel Pitch	271.5 μm	Pixel Defects	< 7*
Brightness	typical 2D - 150 cd/m2 typical 3D - 60 cd/m2	Certifications	FCC Class B, WEEE, CE, RoHS, VCCI, CB Scheme, UL, C-Tick, PSE, SPRING, VCCI
Weight	16.6 lbs	Safety Requirements	FCC Class B, WEEE, CE, RoHS, VCCI, CB Scheme, UL, C-Tick, PSE, SPRING, VCCI
Contrast Ratio	50:1 for 2D and 3D	<small>*Dark or discolored pixels may occur as a result of the LCD manufacturing process. These pixels do not detract from display quality or usability.</small>	
Color	16.7 million		
Viewing Angle	170 H, 160 V 2D ONLY		
Power Requirements	Output: 12 V DC @ 72 W External Power brick Input: 90 to 254 V AC 50/60 Hz		



The SDK includes the following

- A set of C++ APIs
- Virtual coordinate systems match the physical world
- High quality stereo computations
- Easy integration into existing rendering systems
- Extensible plug-in system that connects to zSpace head tracking and stylus tracking as 6-degree-of-freedom inputs
- Easily switch between 3D stylus-beam rendering, and stylus-to-mouse mapping as appropriate
- Automatic left/right frame detection

Support for

- OpenGL 1.4 and later
- Visual Studio 2008, 2010, or 2012
- 32-bit and 64-bit operating environment
- Windows XP and Windows 7 or 8

Minimum System Requirements

- Minimum of 4 GB of memory
- Windows 7 or 8 64-bit or 32-bit or Windows XP 64-bit or 32-bit
- NVIDIA Quadro GPU or AMD ATI GPU with DVI or DisplayPort ports
- Intel or AMD Quad Core CPU 2.2 GHz or higher



zSpace Dimensions & Weights

Item	Dimensions	Weight
Stylus Cable	66 in cable (1676 mm cable)	
Stylus	5.83 x 0.60 x 0.71 in (148 x 15 x 18 mm)	1.6 oz (40 g) w/ cable
Eyewear	5.83 x 1.58 x 5.51 in (148 x 40 x 140 mm)	0.6 oz (15 g)
Clip Ons	5.625 x 1.875 x 0.78 in (144 x 48 x 20 mm)	0.4 oz (10 g)
Stylus Holder	4.33 x 3.74 x 2.17 in (110 x 95 x 55 mm)	4 oz (115 g)
zSpace Display (flat)	25.4 x 16.5 x 2.8 in (644 x 417 x 70 mm)	16.6 lbs (7.6 kg)
zSpace Display (30 degree stand)	25.4 x 16.5 x 2.8 in (644 x 417 x 70 mm)	16.6 lbs (7.6 kg)
Power Supply (excluding AC cable)	5.125 x 2.25 x 1.25 in (32 x 56 x 32 mm)	14.4 oz (10 g)
Accessory Box	20.75 x 6.75 x 3.4 in (520 x 175 x 85 mm)	4.25 lbs (1.92 kg)
zSpace Box (Complete Set in shipping box)	34.5 x 21.5 x 7.25 in (876 x 546 x 182 mm)	28 lbs (12.7 kg)

Tracking & Stylus

x Resolution	2 mm	Pitch Accuracy	+/- 2 deg
y Resolution	2 mm	Roll Accuracy	+/- 2 deg
z Resolution	2 mm	Yaw Accuracy	+/- 2 deg
Pitch Resolution	2 deg	x Update Rate	100 Hz
Roll Resolution	2 deg	y Update Rate	100 Hz
Yaw Resolution	2 deg	z Update Rate	100 Hz
x Accuracy	+/- 3 mm	Pitch Update Rate	100 Hz
y Accuracy	+/- 3 mm	Roll Update Rate	100 Hz
z Accuracy	+/- 5 mm	Yaw Update Rate	100 Hz

