

z space®

Technical Specifications

Display Specification

Size	23.6 inch (diagonal)	Input Voltage	90 to 254 V AC
Resolution	1920x1080 full HD	Connectors	<ul style="list-style-type: none"> • DVI Dual Link • Display Port (1.2) • USB device (to host) • Stylus • DC Power (12 V)
Aspect Ratio	16x9 wide	Included Cable	<ul style="list-style-type: none"> • USB device to computer • DVI-D male to DVI-D male • Power - 3m, black
Response time	Full off to full on rise time <= 2.5 ms, 10% to 90% Full off to full off fall time <= 5.5 ms, 90% to 10%	Stand	The display is fixed at 30 degrees
Pixel Pitch	271.5 µm	Operating Environment	<ul style="list-style-type: none"> • Temperature: 10-40 degrees C • (50 - 104 degrees F) • Humidity: 10 - 80%, non-condensing
Brightness	typical 2D - 150 cd/m2 typical 3D - 60 cd/m2	Pixel Defects*	< 7
Weight	16.6 lbs	Certifications	FCC Class B, WEEE,
Contrast Ratio	50:1 for 2D and 3D	Safety Requirements	CE, RoHS, VCCI
Color	16.7 million		
Viewing Angle	170° H, 160° V 2D ONLY		
Power Consumption	72 W Maximum External power brick		

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



*Dark or discolored pixels may occur as a result of the LCD manufacturing process. These pixels do not detract from display quality or usability.

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 plugin 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 for your application
- Automatic left/right frame detection

Support for

- OpenGL 1.4 and later
- Visual Studio 2008
- 32bit and 64bit operating environment
- Window XP and Windows 7

System Requirement

- Minimum of 8 GB of memory
- Window 7 64-bit or Window XP 64-bit
- NVIDIA Quadro GPU with at least 2 GB of onboard Memory
- Intel quad i7 2.2 ghz+ CPU (non-mobile), Intel Xeon



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
Stylus with Box	6.54 x 2.64 x 1.18 in (166 x 67 x 30 mm)	4.4 oz (125 g)
Eyewear	5.83 x 1.58 x 5.51 in (148 x 40 x 140 mm)	0.6 oz (15 g)
Eyewear with Box	6.125 x 3.375 x 2.0 in (156 x 86 x 50 mm)	4 oz (115 g)
Clip Ons	5.625 x 1.875 x 0.78 in (144 x 48 x 20 mm)	0.4 oz (10 g)
Clip On with Box	6.5 x 2.625 x 1.1875 in (166 x 67 x 30 mm)	2.8 oz (80 g)
Stylus Holder	4.33 x 3.74 x 2.17 in (110 x 95 x 55 mm)	4 oz (115 g)
Stylus Holder with Box	4.53 x 4.25 x 2.44 in (115 x 108 x 62 mm)	7 oz (200 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 9.5 in (644 x 417 x 242 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 mm410)	14.4 oz (10 g)
Power Supply & AC cable with Box	7.5 x 5.75 x 1.5 in (90 x 146 x 38 mm610)	1.4 lbs (15 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)