

ZH451ST

High brightness Golf Sim and Corporate short throw 1080p Full HD laser projector



The ZH451ST is Optoma's most compact Full HD 1080p DuraCore laser projector to date — up to 34% smaller than previous models and up to 45% more energy efficient than lamp-based alternatives.

Powered by DuraCore laser technology, it delivers 4,000 lumens of vivid, consistent image performance for up to 30,000 hours of maintenance-free, mercury-free operation. An external power supply further enhances reliability and energy efficiency.

Purpose-built for conference rooms and boardrooms, the ZH451ST's short-throw design lets you place it just feet from the wall — keeping spaces open and presentations impact-ready. RS232 control and a built-in speaker round out a setup that's as practical as it is powerful.



Specification



Display/image

Display technology	DLP®
Resolution	1080p Full HD (1920x1080)
Brightness	4,200 lumens
Contrast ratio	300,000:1
Native aspect ratio	16:9
Aspect ratio - compatible	4:3,16:9,16:10
Keystone correction - horizontal	+/-15°
Keystone correction - vertical	+/-15°
Displayable colors (millions)	1073.4
Horizontal scan rate	15 ~ 140Khz
Vertical scan rate	24 ~ 120Hz
Uniformity	75%
Screen size	36" ~ 292" diagonal

Lamp info

Light source type	Laser
LASER life	30,000 hours

Optical

Throw ratio	0.49:1
Projection distance	70.8" - 102.6"
Zoom type	Fixed
Focal length (mm)	7.51
Native offset	114%
Input Lag	4K/ 60Hz: 16.7 ms 1080P/ 60Hz: 16.7 ms 1080P/ 120Hz: 8.4 ms

Connectivity

Connections	2x HDMI 2.0 1x VGA-In 2x USB-A (Power / BT Adapter) Audio-in / Audio-out RJ-45 12V Trigger 3D Sync RS-232
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Specification

General

Noise level (min)	29dB
Noise level (max)	36dB
PC compatibility	FHD, UXGA, SXGA, WXGA, HD, XGA, SVGA, VGA, Mac
2D compatibility	NTSC M/J, 3.58MHz, 4.43MHz PAL B/D/G/H/I/M/N, 4,43MHz SECAM B/D/G/K/K1/L, 4.25/4.4MHz 480i/p, 576i/p, 720p(50/60Hz), 1080i(50/60Hz), 1080p(50/60Hz)
3D compatibility	Yes (DLP 3D; PC frame sequential 120Hz 3D, Blu-ray DVD 3D)ver-Under: 1080p24, 720p50 / 60
3D	Full 3D
Security	Security bar, Kensington Lock, Password protected interface
IP rating	IP6X
OSD / display languages	25 languages: Arabic, Czech, Danish, Dutch, English, Farsi, Finnish, French, German, Greek, Hungarian, Indonesian, Italian, Japanese, Norwegian, Polish, Portuguese, Romanian, Russian, Chinese (simplified), Spanish, Swedish, Chinese (traditional), Turkish, Vietnamese
24/7 operation	Yes
360° operation	Yes
Operating conditions	0°C ~ 40°C, Max. Humidity 80%, Max. Altitude 2,500m
Remote control	Card style
Speaker count	1
Watts per speaker	15W
In the box	AC power cord Remote control CR2025 battery Quick Start Guide

Power

Power supply	External power supply, 100V ~ 240V, 50-60Hz
Power consumption (standby)	
Power consumption (min)	112W
Power consumption (max)	150

Weight and dimensions

Dimensions (W x D x H)	10.79" x 8.5" x 4.49"
Gross weight	9.92 lbs
Net weight	6.61 lbs
UPC	796435 44 838 7

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