

ZH451

Compact High Brightness Miracast Wireless Display 1080p Full HD Laser Projector



The ZH451 is one of Optoma's most compact Full HD 1080p DuraCore laser projectors — up to 34% smaller than previous Optoma models. Delivering 4,600 lumens* of powerful image performance, it's engineered for maintenance-free continuous operation in conference rooms, boardrooms, and corporate environments.



Flexible installation is made easy with a comprehensive connectivity suite including dual HDMI 2.0, VGA-in, audio in/out, RJ-45, RS232, 12V Trigger, and a built-in speaker. RS232 support enables seamless monitoring and control, while the streamlined form factor keeps installations clean and unobtrusive.

When paired with Optoma's SmartApp for Android and iOS, the ZH451 becomes even easier to manage. Connect via LAN to power the projector on and off, adjust volume, switch display modes, fine-tune keystone and four-corner correction, and more — all from your mobile device.

Specification

Display/image

Display technology	DLP®
Resolution	1080p Full HD (1920x1080)
Brightness	4,600 lumens*
Contrast ratio	300,000:1
Native aspect ratio	16:9
Aspect ratio - compatible	4:3,16:9,16:10
Keystone correction - horizontal	+/-30°
Keystone correction - vertical	+/-30°
Displayable colors (millions)	1073.4
Horizontal scan rate	15 ~ 135Khz
Vertical scan rate	24 ~ 120Hz
Uniformity	75%
Screen size	30" ~ 300" diagonal



Lamp info

Light source type	Laser
LASER life	30,000 hours

Optical

Throw ratio	1.4:1 ~ 2.24:1
Projection distance	39.37" - 393.7"
Zoom	1.6x
Zoom type	Manual
Focal length (mm)	20.91 ~ 32.62
Native offset	116% +/-5%

Connectivity

Connections	2x HDMI 2.0 VGA-In Audio-In 3.5mm Audio-Out 3.5mm 3x USB-A (Power/dongle) RS232 RJ45 3D Sync-out 12V Trigger
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Specification

General

Noise level (min)	29dB
Noise level (max)	31dB
PC compatibility	VGA, SVGA, XGA, 720p, WXGA, SXGA, SXGA+, UXGA, 1080p, WUXGA
2D compatibility	NTSC, PAL, SECAM, SDTV, HDTV, UHD
3D compatibility	Supports all HDMI 1.4a mandatory 3D formats (Frame pack, side-by-side, top-bottom) and up converts frame rate from 60Hz to 120Hz or 24Hz to 144Hz
3D	Full 3D
Security	Security bar, Kensington Lock, Password protected interface
OSD / display languages	27 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
Ingress protection rating	IP6X
Speaker count	1
Watts per speaker	15W
In the box	AC power cord Remote control 2xAAA Batteries Quick Start Guide

Power

Power supply	External power supply, 100V ~ 240V, 50-60Hz
Power consumption (standby)	
Power consumption (min)	120W
Power consumption (max)	170W

Weight and dimensions

Dimensions (W x D x H)	10.79" x 8.5" x 4.25"
Gross weight	9.92 lbs.
Net weight	6.61 lbs.
UPC	796435 44 862 2

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