

# 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.<sup>1</sup> 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
-------------	--

# Specification

---

## General

<b>Noise level (min)</b>	29dB
<b>Noise level (max)</b>	31dB
<b>PC compatibility</b>	VGA, SVGA, XGA, 720p, WXGA, SXGA, SXGA+, UXGA, 1080p, WUXGA
<b>2D compatibility</b>	NTSC, PAL, SECAM, SDTV, HDTV, UHD
<b>3D compatibility</b>	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
<b>3D</b>	Full 3D
<b>Security</b>	Security bar, Kensington Lock, Password protected interface
<b>OSD / display languages</b>	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
<b>24/7 operation</b>	Yes
<b>360° operation</b>	Yes
<b>Operating conditions</b>	0°C ~ 40°C, Max. Humidity 80%, Max. Altitude 2,500m
<b>Speaker count</b>	1
<b>Watts per speaker</b>	15W
<b>In the box</b>	AC power cord Remote control 2xAAA Batteries EZC-USB Wi-Fi Adapter (Miracast) Quick Start Guide

---

## Power

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

---

## Weight and dimensions

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

# Specification