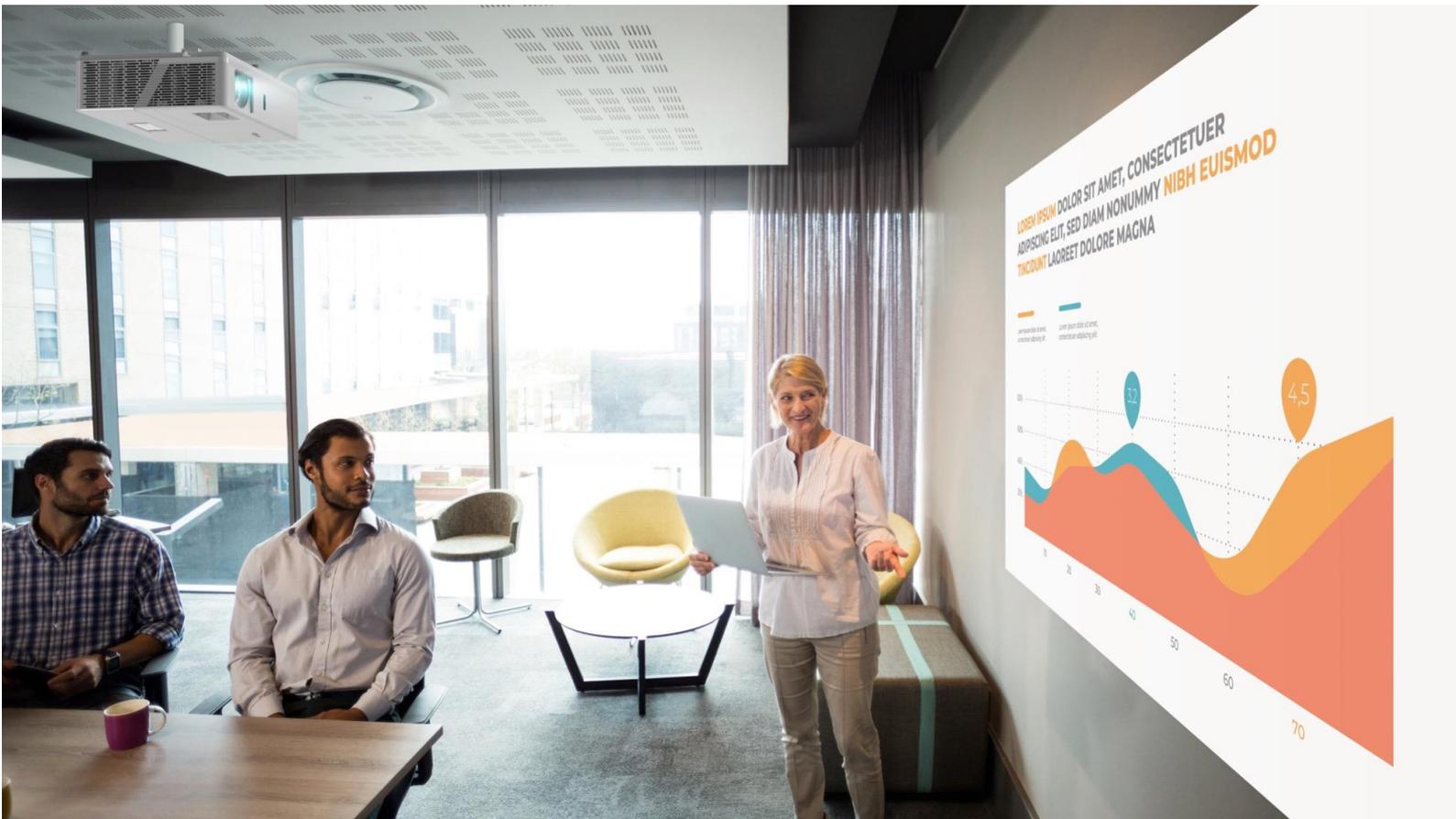# 506 series
ZU506(T) / ZH506(T) / ZW506

The world's smallest and lightest laser projector*

- **The world's smallest and lightest laser projector*** – compact size and light weight makes only one man for installation possible, minimize your labor cost, more easy on set up.
- **4K & HDR compatible*** – The world's 1st projector capable to accept native 4K signals and compatible with HDR10.
- **Optoma DURACORE Technology – IP6X certified system** that provides good brightness maintenance & reliability.
- **Install and forget** – up to 30,000 hours** laser light source life and virtually zero maintenance for system.
- **Amazing color** -- 99% Rec.709 color gamut coverage to render lifelike images.
- **Easy installation** -- big 1.6x zoom & vertical lens shift with smallest size among competition make it labor and time saving for installation.
- **Tilt free orientation, including portrait mode** -- the system is designed to be installed at any desired angle even for the challenging professional AV installation spaces.

DURACORE LASER | 4K COMPATIBLE | HDR COMPATIBLE | IP6X CERTIFIED | | FREE | Vertical Lens Shift | 99% Rec. 709 | | 24/7

Focusing on its brightness, world's smallest and lightest compact design and useful vertical lens shift in the 5,000 to 6,000 lumens class, the 506 series projector is offering best value for the entry professional installation market.

The 506 series projector is perfect for those applications that simply require the brightness level, ease of installation, with minimum maintenance for up to 30,000 hours. Delivering outstanding reliability, high intensity brightness, compact design, stunning colors and spectacular image quality, the 506 series is precision engineered to power larger than life experiences.

Optoma 506 series, especially the ZU506(T) & ZH506(T) are the perfect solution for businesses, conference rooms, higher education, auditoriums, exhibitions, digital signage, entertainment venues, projection mapping, and simulation.

The world's smallest & lightest laser projector*

Compact size and light weight makes only one man for installation possible, minimize your labor cost, more easy on set up
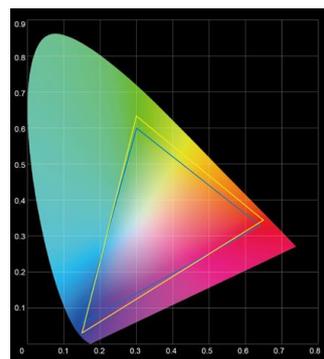

Robust & Reliable Optoma DURACORE

Optoma 506 series is designed with Optoma's Airtight Optical Engine with IP6X certification.The airtight enclosure resists dust particles and ensures a long lasting, reliable and maintenance free experience, with ultimate brightness consistency and reliability.
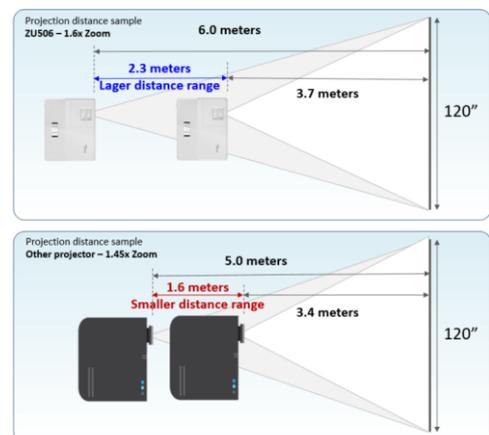
The Mercury free laser light source is rated for up to 30,000 hours** enabling a low total cost of ownership.

○ Optoma 506 series Lamp-less Laser projector

Up to 30,000 hrs*
Almost ZERO maintenance

○ Lamp-based Light Source Life

| 3,000 hrs | 3,000 hrs | 3,000 hrs | 3,000 hrs | 3,000 hrs | 3,000 hrs | 3,000 hrs | 3,000 hrs | 3,000 hrs | 3,000 hrs |

x 10 lamps +   x 10 labor costs +   x down times

4K / HDR Compatible

The 506 series is the world's 1st projector* capable to accept native 4K signals and compatible with HDR10.

1.6x Zoom Range

A large zoom range enables multiple placement possibilities at a variety of distances from the projection screen.

An advantage to this is that expensive interchangeable lens projectors can be substituted with a more cost effective solution whilst still retaining a diverse choice of positioning options.

Amazing Color

The 506 series achieves 99% Rec. 709 coverage to render lifelike images that will wow your audience.

506 series ▬ REC.709 ▬

Color Gamut Coverage

Projection distance sample
ZU506 – 1.6x Zoom
6.0 meters
2.3 meters
Lager distance range
3.7 meters
120"

Projection distance sample
Other projector – 1.45x Zoom
5.0 meters
1.6 meters
Smaller distance range
3.4 meters
120"

Vertical Lens Shift

Simplify installation with lens shift, which provides a wide range of projector placement possibilities.

Model	Vertical lens shift range
ZU506(T)	8% (99%~107%)
ZH506(T)	15% (103%~118%)
ZW506	15% (100%~115%)

4 - Corner Adjustment

By individually adjusting each corner of the image, it eliminates any crooked or distorted images in off-angle or restricted space installations for that perfect picture.
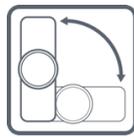
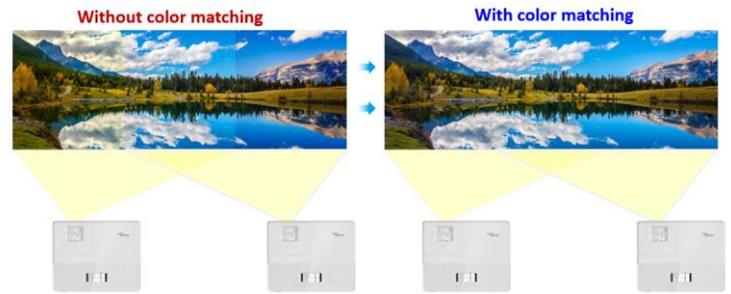## Versatile Installation

360°
Installation

24/7

Designed for
Continuous
24/7 Operation

Portrait Mode

Color Matching Mode

The color matching system, combines accurate measurements across multiple projectors creates seamless blends every time.

Without color matching   With color matching

Network control protocols

Versatile System Integration Control Protocols Crestron RoomView, Extron's IP Link, AMX dynamic device discovery, PJ-Link, Telnet and HTTP protocols are fully supported, allowing the series to be controlled across a network, keeping you in control, wherever you are.

RoomView® server edition   PJLink®   Extron IP LINK CERTIFIED   AMX DEVICE DISCOVERY

AV Mute

In situations where only absolute darkness is required, the ZU506(T) and ZH506(T) series can provide a total blackout that functions like mechanical shutter. The change between normal projection to a total black image and vice versa is instantaneous.
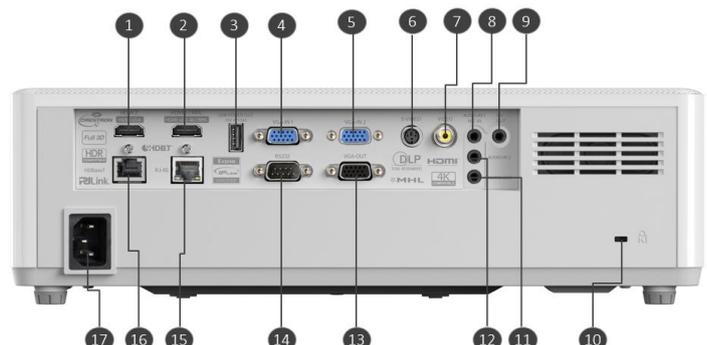
AV Mute

*Among comparison for all laser projector in the 5,000 to 6,000 lumens class as of February 2019.
**For ECO mode use, light source life is dependent on many factors, including display mode, usage, environmental conditions and more. Light source brightness will decrease over time.
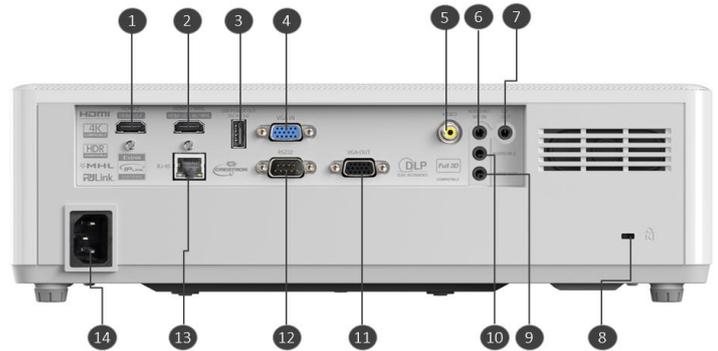
Input / Output

ZU506T / ZH506T

1. HDMI 2
2. HDMI 1/ MHL
3. USB A for power (5V, 1.5A)
4. VGA-In 1
5. VGA-In 2
6. S-Video
7. Composite
8. Audio-In 1 / Mic
9. 12V Out
10. Kensington Lock

11. Audio out
12. Audio-In 2
13. VGA Out
14. RS232
15. RJ45
16. HDBaseT
17. Power Socket

Input / Output

ZU506T / ZH506T

1. HDMI 2
2. HDMI 1/ MHL
3. USB A for power (5V, 1.5A)
4. VGA-In
5. Composite
6. Audio-In 1 / Mic
7. 12V Out
8. Kensington Lock
9. Audio out
10. Audio-In 2
11. VGA Out
12. RS232
13. RJ45
14. Power Socket

ZW506

1. HDMI 2
2. HDMI 1/ MHL
3. USB A for power (5V, 1.5A)
4. VGA-In
5. Composite
6. Audio-In 1 / Mic
7. Kensington Lock
8. Audio out
9. Audio-In 2
10. VGA Out
11. RS232
12. RJ45
13. Power Socket
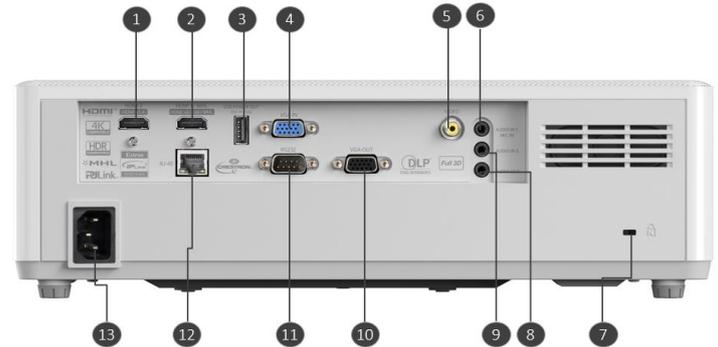
Specification

Native Resolution	ZU506(T)：WUXGA, 1920 x 1200 ZH506(T)：1080p, 1920 x 1080 ZW506：WXGA,1280 x 800	Brightness	ZU506(T) / ZH506(T)：5,000 lm ZW506：5,200 lm
Contrast Ratio	300,000:1 (w/ Extreme black)	Projection Lens	F/2.5~3.26; f=20.91~32.62mm, 1.6x Manual Zoom
Throw Ratio	ZU506(T) / ZH506(T)：1.4 ~ 2.24 ZW506：1.47 ~ 2.35	Offset (all with tolerance ± 5 %)	ZU506(T)：99%+8% ZH506(T)：103%+15% ZW506：100%+15%
Keystone Correction	±30˚ vertical, ±30˚ horizontal	Projection Screen Size	ZU506 : 20.8"~331.6" ZH506 : 20.2"~322.6" ZW506 : 20"~316"
Lens Shift (tolerance ± 5 %)	Vertical Lens Shift ZU506(T)：99%+8% ZH506(T)：103%+15% ZW506：100%+15%	Aspect Ratio	ZU506(T) / ZH506(T)：4:3, 16:9 or 16:10, LBX, Native, Auto ZW506：4:3, 16:9, LBX, Native, Auto
Projection Distance	1.0 ~ 10 M	Video Compatibility	480i/p, 576i/p, 720p/1080i (50/60Hz), 1080p (24/50/60Hz), 2160p(24/50/60Hz)
Uniformity	80%	Display Colors	1073.7 Million (10 bit)
Horizontal Scan Rate	15.375 ~ 91.146 KHz	Vertical Scan Rate	24 ~ 85 Hz
Connections	Please refer to input and output section on page.4 and page.4	Computer Compatibility	UHD, WUXGA,1080P,UXGA, SXGA+,SXGA ,WXGA+,WXGA,720P,XGA,SVGA, VGA Compression, VESA standards, PC & Macintosh compatible
3D Support	Full 3D	Light Type	Laser Phosphor
Speakers (watts)	10W x2	Light Source Life (hours)	30,000 hours to 50% brightness (Eco)
Noise Level (Eco)	30 dB		
Weight (kg)	5.5+-0.5	Size (WxDxH mm)	374 x 302 x 107 (excluded adjustment feet)
Heat Dissipation (BTU/Hr)	Max. 1,201 BTU/h @110VAC 1,164 BTU/h @220VAC	Power Consumption	Typ. 321W@110VAC, 310W@220VAC Eco Standby : <0.5W Active Standby : <2W