



NEW

# ZH521

Full HD 1080p Laser Projector

5,500-lumen Full HD 1080p DuraCore laser projection designed for meeting rooms, presentation spaces, training environments, houses of worship, and bright home entertainment.



1080p  
Full HD

Full HD 1080p Image



5,500 Lumens  
High Brightness

DuraCore  
LASER

DuraCore Laser  
30,000h Laser Life



Dust-resistant Design  
for Reliable Operation

## Bright, Dependable Projection for Rooms that Stay in Use!

### Key Benefits



**5,500 Lumens High Brightness\***  
Delivers clear, vibrant images in classrooms, meeting rooms, training spaces, and environments with ambient light.



**Flexible Installation**  
1.3x zoom, 360° and portrait projection make installation easier in any space and support creative display applications.



**Full HD 1080p Resolution**  
Provides sharp image detail for presentations, video content, signage, and professional display use.

### Long-lasting & Reliable



**Durable and Reliable**  
DuraCore laser technology with sealed engine and dust-resistant design for consistent performance in demanding environments.



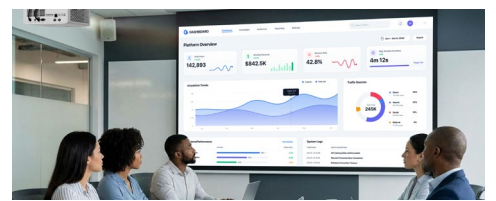
**Low Total Cost of Ownership**  
Up to 30,000 hours of virtually maintenance-free operation reduces downtime and eliminates lamp replacement costs.



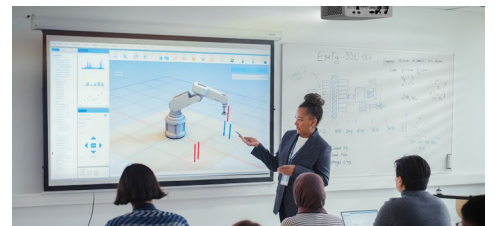
**Compact and Eco-Conscious**  
Compact design with lower power consumption helps reduce energy use and total cost of ownership.

### Versatile Application

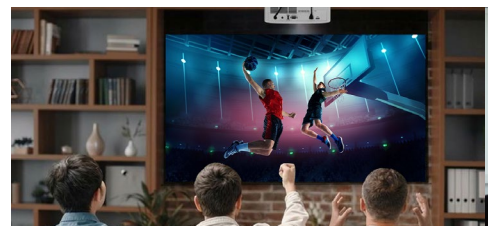
Meeting Rooms



Training Spaces



Home Theater



\*Brightness measured in accordance with ISO 21118

Optomausa.com



DuraCore  
Laser



5,500  
LUMENS



1080p  
Full HD



Dust  
Resistant



1.3x  
Zoom



# ZH521

## Technical Specifications

Professional performance. DuraCore laser reliability. Everything needed for vibrant presentations, collaborative learning, worship experiences, and bright-room entertainment.



| DISPLAY / IMAGE        |                                    |
|------------------------|------------------------------------|
| Display technology     | DLP™                               |
| Resolution             | 1080p Full HD (1920 x 1080)        |
| Brightness             | 5,500 lumens                       |
| Contrast ratio         | 300,000:1                          |
| Dynamic contrast ratio | 3,000,000:1                        |
| Native aspect ratio    | 16:9 (Compatible 4:3, 16:9, 16:10) |
| Displayable Colors     | 1,073.4 Million                    |
| Keystone correction    | H: ±30°, V: ±30°                   |
| Horizontal scan rate   | 15–135 KHz                         |
| Vertical scan rate     | 24–120 Hz                          |
| Uniformity             | 75%                                |
| Screen size            | 30" – 300"                         |

| LIGHT SOURCE      |                         |
|-------------------|-------------------------|
| Light source type | Laser                   |
| Light source life | 30,000 hours (Eco mode) |

| OPTICAL / INSTALLATION |                 |
|------------------------|-----------------|
| Throw ratio            | 1.13:1 ~ 1.47:1 |
| Projection distance    | 1m ~ 10m        |
| Zoom                   | 1.3x            |
| Zoom type              | Manual          |
| Focal length           | 16.90 ~ 21.61   |
| Projection             | 360° & Portrait |
| Native offset          | 116%            |

| CONNECTIVITY |                                                               |
|--------------|---------------------------------------------------------------|
| Inputs       | 2 × HDMI 2.0, 1 x VGA, 1 × Audio 3.5 mm, 1 x USB-A Power 1.5A |
| Outputs      | 1 x Audio 3.5mm, 1 x VGA                                      |
| Control      | 1 x RS232, 1x RJ45, 1 x 12V Trigger, 1 x 3D Sync              |

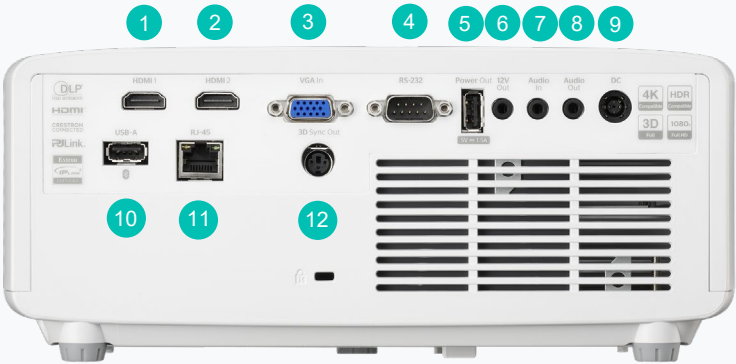
| GENERAL / PERFORMANCE |                                                                                                                                                     |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Noise level (min)     | 29 dB (Eco mode)                                                                                                                                    |
| Noise level (max)     | 35 dB (Bright mode)                                                                                                                                 |
| 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      | DLP 3D; PC frame sequential 120Hz 3D, Blu-r                                                                                                         |
| 3D                    | Full 3D                                                                                                                                             |
| Security              | Kensington Lock, password protected interface                                                                                                       |
| OSD languages         | 27 languages                                                                                                                                        |
| Operating conditions  | 0–40°C; max altitude 2,500m; Max humidity 80%                                                                                                       |
| 24/7 operation        | Yes                                                                                                                                                 |
| Speaker               | 1 × 15W                                                                                                                                             |
| In the box            | AC power cord, remote control, basic user manual, 2 x AAA Batteries                                                                                 |
| Warranty              | 5 Years or 12,000H (whichever comes first)                                                                                                          |
| UPC                   | 796435 44 845 5                                                                                                                                     |

| POWER             |                                |
|-------------------|--------------------------------|
| Power supply      | External, 100V ~ 240V, 50-60Hz |
| Standby           | <0.5W                          |
| Power Consumption | 147W (Min) & 210W (Max)        |

| WEIGHT / SIZE |                     |
|---------------|---------------------|
| Dimensions    | 10.8" x 8.5" x 4.5" |
| Gross weight  | 9.7 lbs             |
| Net weight    | 6.4 lbs             |



### REAR I/O / PRODUCT VIEW | CONNECTIVITY



1. HDMI 1
2. HDMI 2
3. VGA In
4. RS232
5. USB-A 1.5A
6. 12V Out
7. Audio In
8. Audio Out
9. DC In
10. USB-A
11. RJ-45
12. 3D Sync Out

### PRODUCT DIMENSIONS



Optoma  
NO. 1 DLP® LASER BRAND IN AMERICAS\*  
\*Data source: PMA Research Worldwide Projector Census, Q3 2025



Optoma is a visual solutions provider that has delivered stunning experiences to millions of people since 2000. For the last two decades, we have grown our business to become one of the world's leading large-display brands. We have demonstrated our capabilities as a first-mover, innovator, and market leader and firmly established our position as the world's leading 4K UHD projector and DLP® brand.