

DS328

Big projection

- Bright projection – 2800 ANSI Lumens
- SVGA resolution, 13,000:1 contrast ratio
- Low ownership costs - up to 10,000 hours² lamp life
- Lightweight and portable



DS328

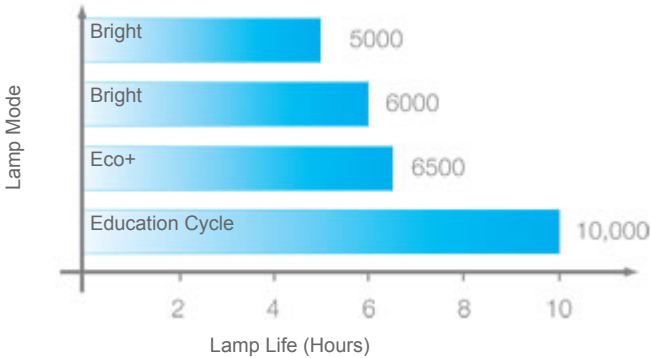
Ideal for use in a meeting room or classroom, the DS328 has a bright 2800L and 13,000:1 contrast allowing you to project bright, crystal clear images with superb colours using DLP® and BrilliantColor™ technologies. Incredible lamp life of up to 10,000 hours combined with Eco+ technology provides energy and money saving features. Installed or on the move, the versatile DS328 incorporates a built in speaker, 120Hz 3D Ready technology and optional wireless capabilities that are easy to use.

Bright Images

Project in ambient light conditions with the ultra bright 2800 ANSI Lumens. Ideal for meeting rooms and classrooms.

Cost Saving – Long Lamp Life

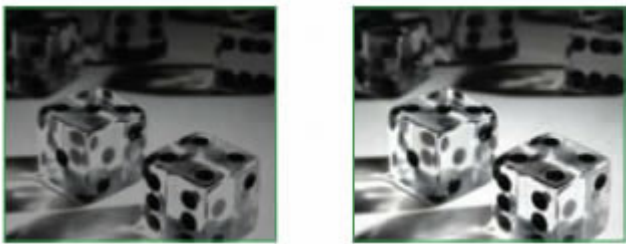
Reduce the number of lamp changes with lamp life of up to 10,000 hours² using the Education Cycle.



Clear, Focused Images

Produce a stunning 13,000:1 contrast ratio for pin sharp graphics and crystal clear text using the unique Dynamic mode feature.

Combined with DarkChip3 technology for Texas Instruments, Dynamic mode automatically adjusts the lamp output, based on the brightness information of each frame; to create a stunning high contrast ratio. Bright scenes are crisp and clear, while dark scenes remain detailed with deep blacks which gives exceptional light and shade detail.



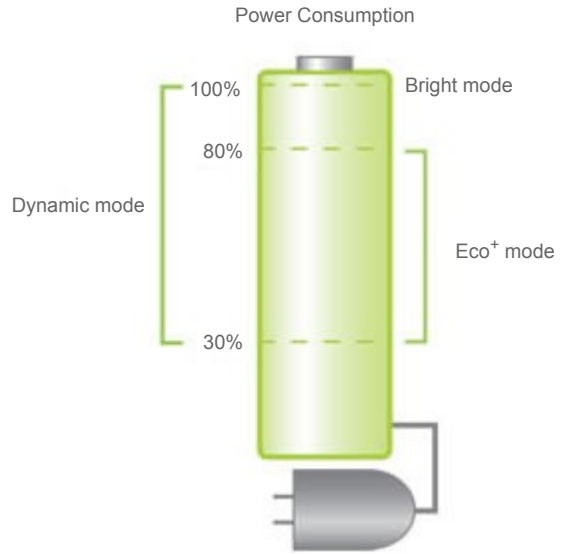
Green Solutions



Eco+ technology from Optoma increases our commitment to reducing the impact we all make on the environment

Eco+ Mode

Saving energy saves money! Eco+ technology reduces the power consumption to as little as 30%. This intelligent feature can more than double your expected lamp life, lowering the total cost of ownership and reducing maintenance.



Auto Power Off

There may be instances when the projector is left running when not in use. To help save energy if the projector is left running and no source is detected, the "Auto Power Off" feature automatically turns off the projector after a set period of time.

Eco AV Mute

Stay in control of your presentation with the Eco AV mute feature. Direct your audience's attention away from the screen by blanking the image when no longer needed. This also instantly reduces the power consumption to 25%, further prolonging the life of your lamp.



Eco AV mute off
100% power consumption

Eco AV mute on
25% power consumption



We know that improving our products is the best way to reduce our impact on the environment. That's why at Optoma we design our products to have a long usable life, use fewer materials, ship with the minimum packaging and be free of all possible toxic substances. Naturally, energy efficiency and being recyclable are built in at the design stage. With each new product, we strive towards minimising our environmental impact.

Audio Capability

Built-in 2W speaker offers excellent audio support. The DS328 is easy to set up without the need for costly external speakers.



Control

RS232 Compatibility - The DS328 comes with an extensive RS232 command set making it simple and easy to control with any control system. AMX Compatibility - Dynamic Discovery Protocol is incorporated into the DS328. This feature allows for easy installation with AMX control systems.



Amazing Colours

The DS328 incorporates BrilliantColor™ technology to produce stunningly bright images with perfectly balanced life-like colours.

Colour Guarantee



We are so confident that the DS328 image colour quality will remain as good as the day you bought it that we will guarantee it for five years.

BrilliantColor™



The DS328 incorporates BrilliantColor™ multi-colour processing technology to bring stunning, vibrant colour to your screen. Using six separate primary and secondary colours to produce a new level of colour performance and control; BrilliantColor™ increases colour brightness by up to 50% over other technologies to create accurate true to life images.

Rapid Off

It takes less than 10 seconds for the projector to power up and shutdown, saving both time and energy.

Quick Resume

Save time by not waiting for the projector to cool down before it can power up again. If the projector is accidentally turned off, this feature allows the projector to be instantly powered on again, if selected within a period of 100 seconds.



Easy Lamp Replacement

Top loading lamp cover allows easy access to replace lamps without having to remove the projector from the mount.

3D Ready

Using the inherent speed of DLP technology, The DS328 can output video and images at an astonishing rate of 120Hz, allowing you to show full screen, full colour, stereoscopic 3D. Perfect for Business and Education.



Remote Mouse

Keep your audience's attention focussed on the right things using the simple, yet powerful remote with USB mouse control.

Wireless Presenting (optional extra)

Making presentations couldn't be easier using the optional wireless features of the DS328. Using the Wireless Adapter you can connect and display presentations and video material wirelessly from a laptop, PC or mobile device. (Additional power required)



Specification Table

Display Technology	Single 0.55" SVGA DC3 DMD chip DLP® Technology by Texas Instruments
Native Resolution	SVGA 800 x 600
Brightness - BRIGHT mode ¹	2800 ANSI Lumens
Contrast	13,000:1
Noise Level	26dB (min)
Weight	2.21 kg
I/O Connectors	Inputs: 2 x 15 Pin D-sub (RGB/YpPr), S-Video, Composite, Audio In, USB (remote mouse) Outputs: 15 Pin D-sub, Audio Out Control: RS232 - 9 Pin
Preset Mode	PC: For computer or notebook (Brightest image) Movie: Maximum contrast and Colour accuracy Game: Bright vivid colour sRGB: For Standard PC Colour (Best Colour Reproduction) User: Memorises user's settings
Maximum Resolution	UXGA 1600 x 1200
Computer Compatibility	UXGA, SXGA, XGA, SVGA, VGA, Mac
Video Compatibility	PAL (B, D, G, H, I, M, N, 576i/p), NTSC (M, 4.43/3.58 MHz, 480i/p), SECAM (B, D, G, K, K1, L) HD (1080i, 720p)
Displayable Colours	1073.4 Million
Projection Lens	F/2.51~2.69; f=21.95~24.18mm, 1.1x Manual Zoom
Throw Ratio	1.97 - 2.17:1
Projection Screen Size	0.69m – 7.62m (27.24" - 300.04") Diagonal 4:3
Projection Distance	1.2 - 12 metres
Horizontal Scan Rate	15.3 - 91.1kHz
Vertical Scan Rate	24 - 85Hz
Lamp Type/Lamp Life ²	190W, 10,000 hours ² (Education Cycle) 6500/6000/4500 hours (Eco+/Dynamic/BRIGHT mode)
Keystone Correction	± 40° Vertical
Audio	2W
Dimensions (W x D x H)	316 x 224 x 124mm
Remote Control	Full function remote with remote mouse and direct source selecting
Power Supply	100-240V, 50-60Hz
Power Consumption	226W BRIGHT mode < 0.5W Standby mode, 194W Eco+ mode < 0.5W Standby mode
Operating Conditions	5°C - 40°C, Max. Humidity 85%, Max. Altitude 3000m
Uniformity	85%
Security	Security Bar, Kensington Lock, Password Protection
Standard Accessories	AC Power Cord, VGA Cable, Infra Red Remote Control with Batteries, Quick Start Card, CD User Manual, Warranty Card
Optional Accessories	Ceiling Mount Kit
RoHS	Compliant
3D Support	The 3D features of Optoma projectors can only be used with compatible 3D content. Typical applications include use with 3D educational or 3D design and modelling systems.
3D Viewing	Requires the Optoma DLP-Link shutterglasses - available separately.
3D Compatibility	Side-by-Side: 1080i50 / 60, 720p50 / 60 Over-Under: 1080p24, 720p50 / 60
Offset	115%

Easy To Use Remote

DS328 Remote Control

1. Power
2. Mouse select
3. Source
4. Re-sync
5. Left mouse click
6. Right mouse click
7. Mouse control
8. Display mode
9. Page up/down control
10. Vertical keystone correction
11. Volume control
12. Brightness
13. Menu
14. Direct input source select
15. Eco AV mute
16. Eco+
17. 3D control



DS328 Connections

18. Audio In (VGA)
19. S-Video
20. VGA 1
21. VGA Out
22. RS232
23. USB (Remote Mouse)
24. Audio In (S-Video/Video)
25. KensingtonTM Lock
26. Audio Out
27. Video
28. VGA 2



Projection Distance 1.2 - 12m (4:3 Aspect Ratio)

Projection Distance (m)	Max. Horizontal Image Size (m)	Min. Horizontal Image Size (m)	Max. Vertical Image Size (m)	Min. Vertical Image Size (m)	Min Diagonal Image Size (m)	Max Diagonal Image Size (m)	Min Diagonal Image Size (inch)	Max Diagonal Image Size (inch)	Max. Image Offset (m)
1.20	0.61	0.55	0.46	0.42	0.69	0.76	27.24	30.00	0.07
2.00	1.02	0.92	0.76	0.69	1.15	1.27	45.40	50.01	0.11
2.50	1.27	1.15	0.95	0.87	1.44	1.59	56.75	62.51	0.14
3.00	1.52	1.38	1.14	1.04	1.73	1.91	68.10	75.01	0.17
4.00	2.03	1.84	1.53	1.39	2.31	2.54	90.80	100.01	0.23
5.00	2.54	2.30	1.91	1.73	2.88	3.18	113.50	125.02	0.29
6.00	3.05	2.76	2.29	2.08	3.46	3.81	136.19	150.02	0.34
7.00	3.55	3.23	2.67	2.43	4.04	4.45	158.89	175.03	0.40
8.00	4.06	3.69	3.05	2.77	4.61	5.08	181.59	200.03	0.46
9.00	4.57	4.15	3.43	3.12	5.19	5.72	204.29	225.03	0.52
10.00	5.08	4.61	3.82	3.46	5.77	6.35	226.99	250.04	0.57
11.00	5.58	5.07	4.20	3.81	6.34	6.99	249.69	275.04	0.63
12.00	6.09	5.53	4.58	4.16	6.92	7.62	272.39	300.04	0.69



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¹Brightness and lamp lifetime will vary depending on the selected projector mode, environmental conditions and usage. As is common with all lamp based projectors, brightness will decrease over the lamp lifetime. ²Typical lamp life achieved through testing and will vary according to operational use and environmental conditions. 10,000 hours lamp life is based on a daily cycle that reflects projector usage in a typical education environment. Details of this cycle are available on request. ³Optoma guarantees that in normal use, Optoma DLP® colour quality will be indistinguishable from when new. Exclusions: (a) Guarantee is voided if the projector is subject to damage through misuse. (b) Guarantee may be void in industrial or commercial entertainment environments where dust or smoke is excessive (c) Guarantee will not apply if lamp brightness is below 50% due to wear or if the projector is not working due to other faults. (d) Over time worn lamps within all projector types will show a slight colour variance. Copyright © 2013, Optoma Europe Ltd. All other product names and company names used herein are for identification purposes only and may be trademarks or registered trademarks of their respective owners. Errors and omissions excepted, all specifications are subject to change without notice. DLP®, BrilliantColor™ and the DLP logo are registered trademarks of Texas Instruments. All images of products are for representation purposes only. Whilst every care is taken to provide accurate images of our products, actual products may differ slightly. Some product images may have been digitally altered by us to add an Optoma logo to the front panel. Optoma reserves the right to amend or alter actual product, product specifications or product images without notice. Some images may be simulated.

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