

OV-515

50" SXGA+ DLP™ projection series



Barco's OV-D2 series integrate cutting edge DLP™ technology into 50" video wall systems that are designed and optimized for use in a 24/7 mission critical environment. The Barco designed projection engine provides a set of unique features. The result is an unrivaled DLP™ rear projection system with outstanding picture quality, reliability and ease of use.

Superior display quality

- latest high contrast DLP™ technology
- brightness, contrast, and large viewing angles tailored to the human eye providing maximum readability
- vibrant colors
- Sense® technology providing continuous video wall uniformity over time

Reliability and lifetime serviceability

- engineered for ease of maintenance
- durable components with high reliability from lamp to screen
- dual redundant lamp offering 100% reliability
- easy lamp replacement from the rear of the system while system runs
- 100% sealed off optical engine
- fast Ethernet communication allowing fast access and upgrading
- Barco's Lamp-Lease Program allowing to efficiently control operational costs

Flexibility

- designed to form video walls of any size, in a linear or curved setup
- requires minimal installation depth
- innovative modular concept

Integrated system

- central graphical overview of video wall with Barco Control Manager for video walls software
- integrating individual video wall modules into one image

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Features of the OV-515 projection modules

Sense⁶

Sense⁶ brings wall uniformity to a next level.

Not only does Sense⁶ increase color and brightness uniformity in the corners of each single projection module, Barco's innovative Sense⁶ technology also keeps all projection modules equal over time and across the entire display wall.

By integrating a patented brightness and color sensor, the display wall's color and brightness is continuously measured and communicated between projection modules. Sense⁶ automatically matches the brightness of full white, full black and all gray levels in between, as well as the colors of all display modules. The I-lamp recalibrates the color sensor for long-time stability.

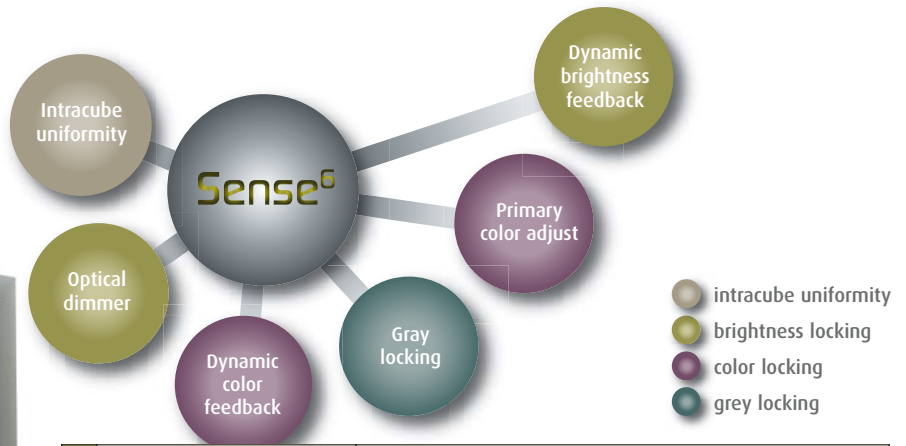
Sense⁶ operates unnoticed in the background and requires no operator intervention whatsoever. For instance, Sense⁶ will work during automatic lamp change without special operator actions. The intended display wall content remains unchanged at all times. No special screen calibration patterns are needed.



50" OV-515	Luminance (cd/m ² ftL)	HVA	HVM	HVX
	120 W	325 96	650 191	1605 472
	132 W	355 104	715 210	1765 519
	Seam Size Screen mullion	0 mm		
	interscreen gap	< 0.8 mm (*) or 0 mm ZeroGap technology		
	Humidity conditions	Up to 90% non condensing		
	Temperature conditions	10°C-40°C 50°F-105°F		
	Storing conditions	0°C-40°C 32°F-105°F		

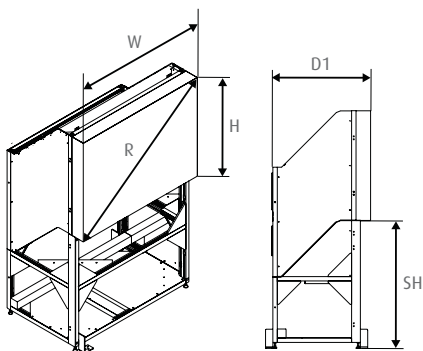
(*) @ 25° C, 50% RH

Screens	Screen type	High contrast	Brightness	Full viewing angle	Halfgain angle (h./v.)	1/5 gain angle
	HVA	Excellent viewing angle	Normal	180°	±35° ±35°	~ ±65° ±65°
	HVM	High viewing angle	Medium	180°	±35° ±27°	~ ±45° ±41°
	HVX	High brightness	High	160°	±35° ±10°	~ ±45° ±17°



Sense ⁶ (Optional)	
Color shift between cubes over time	Shift in ΔE^* over time < 3 (with color lock)
On-screen brightness Uniformity	Very high brightness and color uniformity
ANSI 9 brightness min.	97%
ANSI 13 brightness typ.	95%
Projector color/brightness uniformity	
ΔE^* intercube typ.	< 6
ΔE^* intracube typ.	< 3
Brightness locking	Makes brightness of all cubes equal at all times without operator intervention
	High Dynamic Range (HDR) by Optical dimming preserves contrast, independent of brightness level or lamp life
	Active Dynamic brightness sensor feedback technology measures brightness and serves as input to the optical dimmer
Color locking	Makes color of all cubes equal at all times without operator intervention
	Primary Color Adjust is a color algorithm that adjusts color to a common color target in red, green, blue and white
	Active Dynamic color sensor feedback technology collects color information from all cubes. The True color sensor measures the complete spectrum rather than just red, green and blue and is based upon the standard spectral function according to CIE 1931 (optional)
Grey locking	Makes grey levels equal across display cubes

ΔE^* is a parameter which incorporates color and brightness differences into one unit. Additionally, ΔE^* takes into account the adaptation level of the human eye to brightness and color.



Dimensions	
OV-515	
Width W	1000 mm 39.4"
Height H	750 mm 29.5"
Diagonal R	50" nominal
Full depth D1	664.5 mm 26.2"
Aspect ratio	4:3
Standard height	875, 1000, 1200 mm 34.5", 39.4", 47.2"
Min screen height	455 mm 17.9"
Weight	62 kg

Technical specifications OV-515

Display capabilities	Resolution	SXGA+ 1400 x 1050 TruePixel		
	Absolute resolution	36 dpi		
	Luminous flux @ 6500 K	1000		
	Contrast	1700:1		
	Color	100% EBU		
	White point	6500 K, natural lighting (1)		
	Imaging device	DMD-chip	0.95" LVDS ±12° darkmetal III	
Pixel accuracy		PixelTrue display, shows each pixel true to the input pixels without scaling or smoothing effects		
MTBF of DMD		typ. 650,000 hours		
Life time of DMD		typ. > 100,000 hours		
Image retention		no image retention or burn-in		
Lamps		Lamps	Choice between 120 and 132 W	
	Lamp life (2)	120 W	132 W	
		10,000 hrs	6,000 hrs	
	Lamp redundancy	Cold standby or hot standby with redundant powersupply Automatic lampswitch by Autosensing lamp failure		
	Lamp replacement	Defect lamp can be hot-swapped without image loss		
	Lamp switch	Dynamic feedback of brightness and color readjust display wall to equal performance		
	Switching Time	< 1.5 seconds		
	I-lamp	intelligent lamp carries o.a. lamp life information & spectrum		
	Colorwheel	Colorwheel, rotation speed & lifetime	Colorwheel cartridge with MTTR < 5 minutes.	
			Rotationspeed 3x better for image representation.	
		Lifetime airbearing with rating of 50,000 hours		

(1) Special 3200 K option for backdrop

(2) Lamp manufacturer specs @ IEC 61947-1 test conditions

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Barco Control Rooms is an ISO 9001 registered company. The information and data given are typical for the equipment described. However any individual item is subject to change without any notice. The latest version of this product sheet can be found on www.barcocontrolrooms.com
DLP™ technology by Texas Instruments offers crystal clear images with superior quality. DLP is a trademark of Texas Instruments.



Inputs & outputs	AC input voltage	100-240 VAC, 60-50 Hz		
	Power (W)	120 W	132 W	
	Cold Standby	< 250	< 275	
	Hot Standby	< 390	< 430	
	Heat dissipation (BTU/h)	120 W	132 W	
	Cold Standby	< 850	< 900	
	Hot Standby	< 1325	< 1375	
Signal	Signal input/output	Dual DVI-D in / Dual DVI-D out with loopthrough		
	Pixel clock	165 Mhz		
	Input frequency	Multi sync 30Hz-75Hz		
	Genlock range	Genlock in 49-61 Hz range		
	Supported input resolutions	VGA, SVGA, XGA, SXGA, SXGA+, UXGA, 1080p DVI-D format (with scaler)		
	Cropping	Yes		
	Scaling (optional)	up- and down scaling		
	Communications	Barco control manager	Graphical representation of display wall on operator PC	
			Integrates separate display wall modules into a single display, allowing a.o. Sense6	
			Client - server architecture provides central display wall logic with multiple access from multiple sites	
		Health Status in the blink of an eye and support for trouble shooting		
		Configuration of different settings		
		Wall control by the operator		
		Multiple access levels		
Direct ethernet access		Display wall module settings and control over CAT5 cable through standard ethernet browser.		
		Easy and fast firmware upgrading over ethernet		
Autodiagnosics		Low level projector self test		
Integration to third party equipment	External display wall control from different devices through SOAP based API			

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