

# OverView cPU67-DL



## Dual-lamp UXGA polysilicon display module



- High quality displays based on cutting edge polysilicon technology with high brightness, resolution and excellent color contrast
- Configuration in both linear or curved setup
- Minimal installation depth
- Enclosed structure to avoid incident light and dust
- Rear access of the system allows maintenance without distracting the operators
- Ease of maintenance has been designed in from the start; all parts and consumables are easy reachable and designed for minimum down-time of the module

**BARCO**

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# UXGA OverView cPU67-DL for dedicated applications

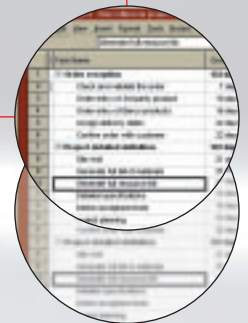
## Unequalled detail & resolution, perfect color & image stability

Barco has developed the Overview cPU67-DL series projection modules to provide key features for applications where resolution and detail matter. The UXGA resolution allows to show more data and video per unit of surface or to show the same amount of data and video as lower resolutions, but on a smaller surface. In addition, 3-panel poly-silicon technology is known to have better color saturation and a more stable performance than the single panel LCD based product.



**Superb color saturation and high brightness** is of major importance especially for broadcast environments, situationrooms with videoconferencing and command & control centers

**Crisp graphics** with smooth and exceptionally **readable characters**



**Stable & original quality pictures** over time meaning zero hassle and **minimal maintenance**

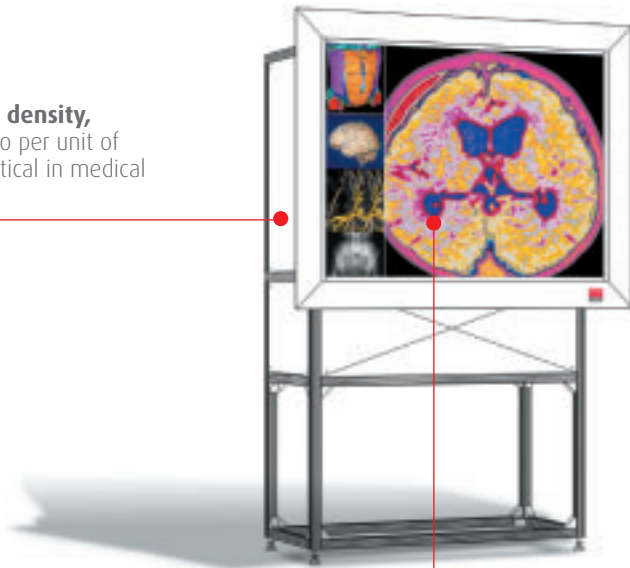
**Efficiency & low cost of ownership**

Barco Control Rooms has developed a projection cube based on UXGA 3-panel polysilicon LCD panels for 24/7 control room environments. UXGA resolution is restricted to LCD type technologies of which polysilicon LCD proves to be uniquely efficient. The design of the 3-panel polysilicon

LCD projection engine is highly advanced because the components of white light, being red, green and blue are split off separately and treated by a dedicated LCD panel each.

This means basically that the loss in the system is kept to a minimum. Compared to projection cubes based on large single panel LCD, the 3-panel polysilicon LCD is 'three times' more efficient. The single panel LCD has red, green and blue filters, which absorb "two thirds" of the white light. 3-panel polysilicon LCD based projection cubes need less lamps, less power and therefore less lamps to replace, less air-conditioning. This results in a very low cost of ownership.

**Higher information density,**  
i.e. more data & video per unit of surface, especially critical in medical applications

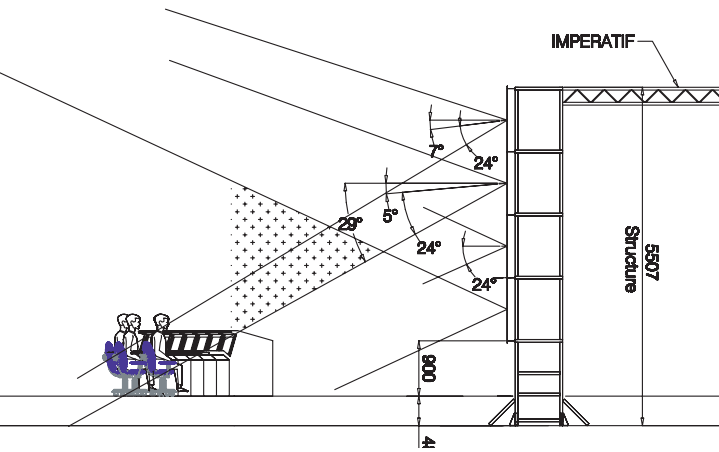


**Higher resolution** increases the amount of viewable data important for medical images, geographical information or to display large applications with several video or RGB sources



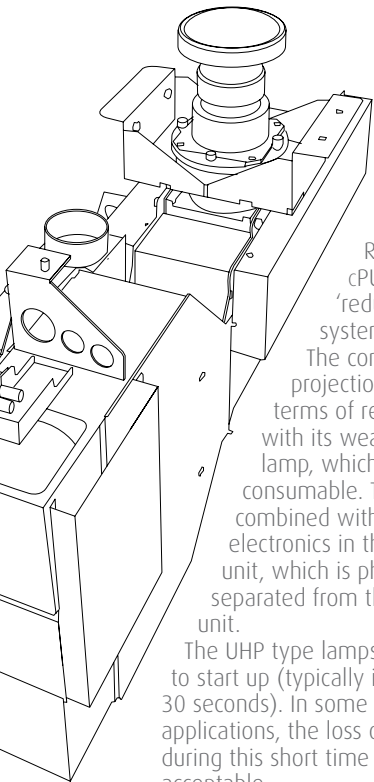
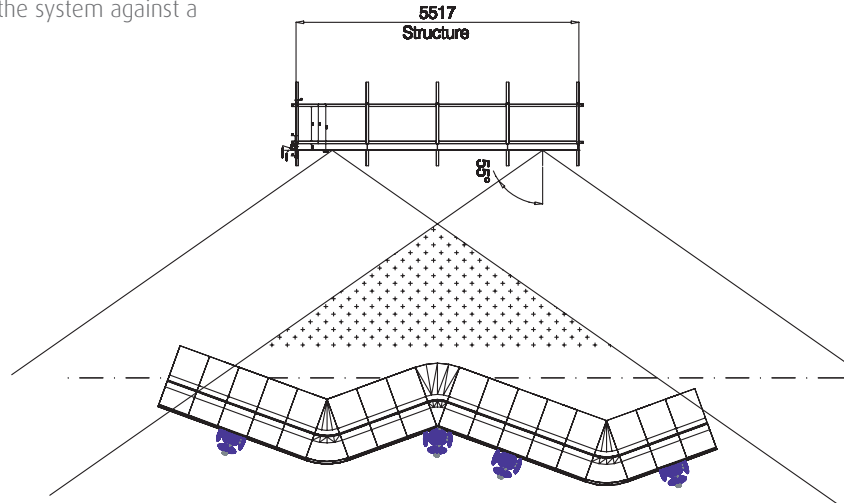
### Ultimate viewing comfort

The OverView cPU67-D is designed to form a display wall of any size in linear or curved set-up with minimal installation depth. It offers ultimate viewing comfort for operators thanks to nearly 180° viewing cones in both horizontal and vertical viewing directions and high-contrast high-precision screens.



Barco's solutions feature an optional architectural trim for stand-alone or built-in solutions and front access to engine, lamps and filters allowing installation of the system against a back wall.

The OverView cPU67-DL is a modular "cube" type construction with the added advantage of being seamless.



### Redundancy and optimal efficiency

Barco Control Rooms OverView cPU67-DL features a 'redundant lamp system'.

The conception of the projection engine in terms of redundancy deals with its weakest link: the lamp, which is the main consumable. The lamps are combined with the lamp electronics in the illumination unit, which is physically separated from the projection unit.

The UHP type lamps take some time to start up (typically in the range of 30 seconds). In some mission critical applications, the loss of light, even during this short time interval is not acceptable.

The dual lamp mechanism with two lamps can be run in the following modes:

- Hot-standby: two lamps are on. The second lamp brings redundancy to the system and guarantees an image at all times.
- Cold-standby: the 'redundant' lamp is started up after lamp failure of the 'master' lamp, which takes around 30 seconds.
- Auto-Switch mode: two lamps are used sequentially and insure that both lamps are being used the same amount of time.



Architectural trim for stand-alone or built-in solutions

Besides providing a solution for 24/7 mission critical applications, the presence of a dual lamp system increases the operational efficiency in general:

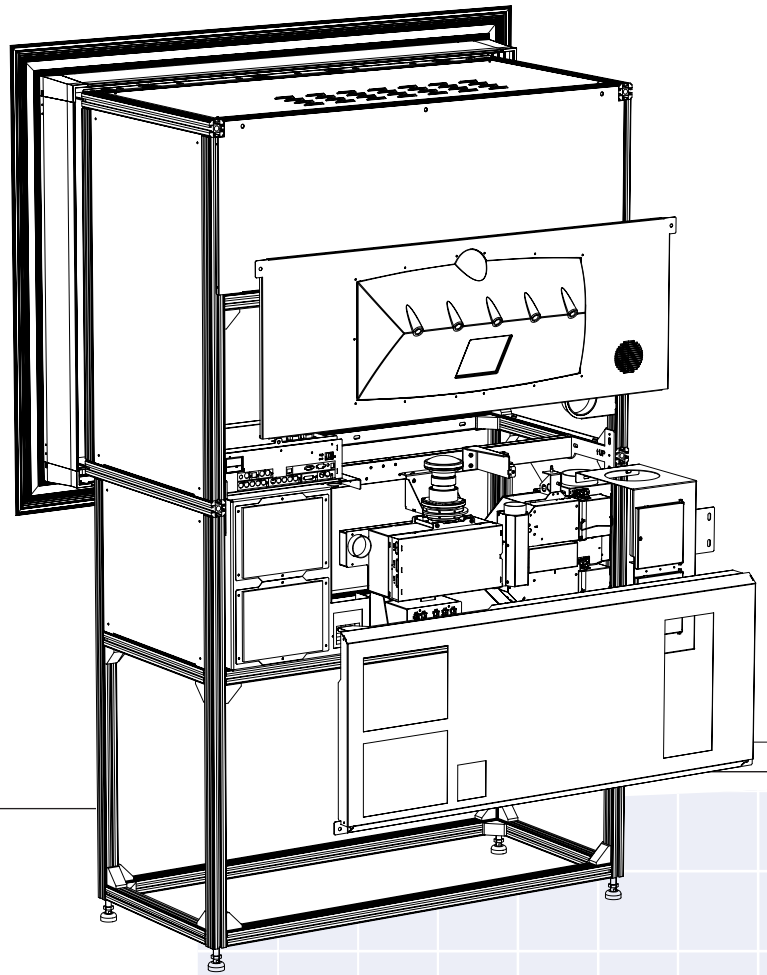
- The operator is not distracted when a lamp change occurs and can concentrate on his work.
- The amount of service interventions can be reduced, because lamp changes can be planned for instead of being a randomized operation.
- The 'slave' lamp can be replaced while the 'master' lamp is running, so no image is lost during maintenance.

# Design-engineered optical solution

## 24/7 mission-critical design module

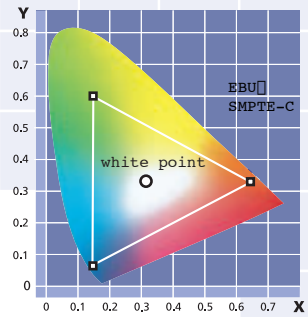
Like all Barco's OverView P projection systems, the OverView cPU67-DL comprises a supporting structure with screen, the projection engine consisting of a projection unit combined with a redundant illumination unit, and a fan module with replaceable filter. The entire lightpath is designed from lamp to screen by Barco Control Rooms to deliver optimal picture quality. Each of the components is optimized for its task electronically, optically and mechanically to fulfill the design parameters for a 24/7 mission critical display module.

*The structure is made up of a black anodized aluminum strut modular framework enclosed with metal panels. The panels maintain a "dark box" around the projection engines to eliminate incidental light. The base has long threaded levelers to insure that the structure is perfectly level. A modular filtering system permits easy replacement without opening the wall allowing maintenance in minutes.*

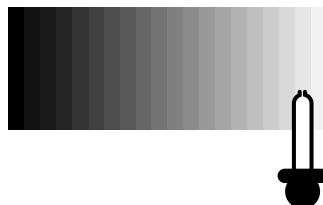


## Projection unit features

The projection unit integrates three novel high contrast UXGA (1600 x 1200) panels and is designed specifically for the rigorous demands of 24/7 control rooms environments. The panels are aligned for optimal and precise convergence. The optical design is optimized to produce a wide variety of colors to guarantee crisp images. All colors within the EBU color triangle can be realized.



Barco's solution is designed to meet EBU standards



The color temperature of the white point is set to be 6500K, providing natural images. Gamma correction is possible by setting the gamma value. Color adjustment algorithms are applied to optimize color uniformity within each cube and from cube to cube.

# OverView cPU67-DL Specifications

<b>Projection Engine</b>	Engine based on 3-panel polysilicon technology	
• AC Input Voltage	110/240 VAC 60/50Hz	
• AC Input power	285 W Cold Standby, 395 W max. (Hot Standby)	
• Heat dissipation	960 BTU/h Cold Standby, 1340 BTU/h max. (Hot Standby)	
• 3-panel Polysilicon technology	1600 x 1200 pixels, UXGA	
• Signal Inputs	DVI-D, DDC supported	
	BNC 5p for analog RGB	
	BNC 5p for Composite video, S-Video, Component Video and RGB	
	SDI	
	S-video on 4-pin mini-DIN	
	optional HD-SDI input/output	
• Genlocking	Yes	
• Frequency range genlock	48 Hz - 62 Hz	
• Lamp type	2 x UHP 100 W	
• Lamp life	2x 8000 hrs (supplier spec.)	
• Lamp switching modes	Hot Standby, Cold Standby, Auto switch-mode	
• Lamp switching time	Image reaches 50% brightness after lamp switch in less then 0.5 seconds	
	Image reaches 50% brightness after lamp failure in less then 1.5 seconds	
• MTBF on LCD panel	Typ. 60,000 hours	
• Contrast	> 400:1	
• Luminous flux	Typ. 500 Lumen	
<b>Screen type</b>	HVA screen	HVA II screen (option)
• General	High Contrast/ Large viewing angles	
• Viewing angle	180° (full angle)	
• Half gain angle	45° (half angle)	35° (half angle) (option)
• Seam size	< 0.3 mm stitch	
<b>Brightness uniformity</b>	>95% (ANSI)	
<b>Luminance</b>	Typ. 75 Cd/m <sup>2</sup>   22 ftL	Typ. 125 Cd/m <sup>2</sup>   37 ftL (option)
<b>Color</b>	EBU color triangle	
• Whitepoint	6500 K	
• Color	16.7 million colors	
• Gamma correction	Yes	
<b>Noise</b>	< 45 dBA measured at 3 m distance	
<b>Operating conditions</b>		
• Humidity	Up to 90% non condensing, depending on wall dimension	
• Temperature	10-40°C/50-105 F, depending on wall dimension	
<b>Storing conditions</b>		
• Temperature	0-40°C/32-100 F	
<b>Screen Size</b>		
• Width	1368 mm   53.9"	
• Height	1026 mm   40.4"	
• Diagonal	67" nominal	
• Depth	940 mm   37"	
• Aspect ratio	4:3	
<b>Structure</b>		
• Side clearance	3"	
• Top clearance	6"	
• Bottom clearance	3"	
<b>Certification</b>	CE, EN60950, UL1950, FCC	

Barco Control Rooms - Belgium  
 Noordlaan 5, 8520 Kuurne  
 Phone (32) (56) 36-8211  
 E-mail sales.bcd@barco.com

Germany Phone (49) (721) 6201-0  
 USA Phone (1) (770) 218-3200  
 Brazil Phone (55) (11) 3842-1656  
 Japan Phone (81) (3) 5762-8720  
 Hong Kong Phone (852) 2397-0752

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