

PH3501QL Laser Projector

Datasheet





The brightest choice for premium visual experiences

Projection is making pioneering new advancements with the NEC PH3501QL 4K RB laser projector delivering 40,000 center lumens brightness. The new flagship model harnesses the best of both laser phosphor and RGB laser technologies resulting in a powerful projector which delivers compelling benefits in terms of cost, operational efficiency and immersive image quality.

With higher brightness, greater detail, more accurate colours beyond rec709 colour space and further installation flexibility you can deliver an unmatched visual experience that will set new standards. The use of a red and blue laser light source goes beyond the colour and brightness output of traditional laser phosphor projection systems providing a brilliant image with high uniformity. The efficient light processing system has a low initial cost compared to RGB laser projectors and delivers huge savings in operational costs compared to Xenon based projection systems by avoiding lamp and filter replacements.

This projector is a premium solution for fixed installations in multi-purpose sports and events halls, theatres, museums and leisure parks as well as for most demanding mapping applications and for rental and staging purposes.

Benefits

Outstanding picture quality – super-bright 40000 center lumen RB laser projection, with real 4K resolution and wide colour space, combined with an homogeneous and contrast-rich laser image quality ensures stunning presentations and impressions.

Enjoy a Lower TCO – highest reliability, maintenance free operation, low power consumption and up to 20000 hours life; the Laser light source results in a significantly lower total cost of ownership.

Maximum installation flexibility – the extra wide vertical +/- 50% and horizontal +/- 17% lens shift combined with a selection of wide zoom bayonet lenses guarantees a hassle-free installation and facilitates easy replacement of old projectors.

Bringing Cinema Quality to the mainstream – NEC's cinema approved digital projection technology, renowned for its smooth, colour rich video processing is integrated within this installation projector.

Future-proof signal connectivity and processing – numerous 4K resolution inputs such as Quad 3G SDI, 2 x DisplayPort, 2 x HDMI plus an optional slot for 4K/UHD OPS Slot-in PCs provide "pixel-free viewing" on a large scale.

Widest application support – portrait mode projection, 360 degree free tilt installation, unique geometric adjustment and 3D support offers unrivalled installation capability.

Relax and rely on laser – stable light output ensures consistent brightness and colour stability over the entire life cycle of the projector.

Cost Saving Device Management – save effort whilst administrating all connected NEC devices from a centralised location by using the NaViSet Administrator 2 software tool.

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Product Name	PH3501QL
Product Group	Laser Projector
Order Code	60004622

Image

Projection Technology DC4K Chip - DLP™ Technology Native Resolution 4096 x 2160 (4K) Aspect Ratio 17:9 Contrast Ratio ¹ 30000:1 (with dynamic contrast) Brightness¹ 35000 Normal / 28000 Eco ANSI Lumen; 40000 Centre Lumen Lamp Laser Light Source Lamp Life [hrs] 20000 Lens 7 optional bayonet lenses Lens Adjustment Motorized Lens shift Up to H:±17, V:+50,-50 Keystone correction +/- 40° manual horizontal / +/- 40° manual vertical Projection Factor depending on lens selection Projection Distance [m] 2 - 50 Screen Size (diagonal) [cm] / [inch] 254 / 100" - 2,540 / 1,000" Zoom Motorized Supported Resolutions 4096 x 2160 (4K); 1920 x 1200 (WUXGA); 640 x 480 (VGA); 480/60 3840 x 2160 (UHD); 2560 x 1600 (WQXGA); 1080p/24/25/30/50/60; 576/50; 2048 x 1080 (2K); 720p/50/60; 480i/50;						
Aspect Ratio 17:9 Contrast Ratio 1 3000:1 (with dynamic contrast) Brightness 1 35000 Normal / 28000 Eco ANSI Lumen; 40000 Centre Lumen Lamp Laser Light Source Lamp Life [hrs] 20000 Lens 7 optional bayonet lenses Lense Adjustment Motorized Lens shift Up to H:±17, V:+50,-50 Keystone correction +/- 40° manual horizontal / +/- 40° manual vertical Projection Factor depending on lens selection Projection Distance [m] 2 – 50 Screen Size (diagonal) [cm] / 254 / 100" - 2,540 / 1,000" [inch] Zoom Motorized Focus Adjustment Motorized Supported Resolutions 4096 x 2160 (4K); 1920 x 1200 (WUXGA); 640 x 480 (VGA); 480p/60 3840 x 2160 (UHD); 1080i/50/60; 576i/50; 2560 x 1600 (WQXGA); 1080p/24/25/30/50/60; 576p/50;	Projection Technology	DC4K Chip - DLP™ Tech	nology			
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Lamp Laser Light Source Lamp Life [hrs] 20000 Lens 7 optional bayonet lenses Lense Adjustment Motorized Lens shift Up to H:±17, V:+50,-50 Keystone correction +/- 40° manual horizontal / +/- 40° manual vertical Projection Factor depending on lens selection Projection Distance [m] 2 - 50 Screen Size (diagonal) [cm] / [inch] 254 / 100" - 2,540 / 1,000" Zoom Motorized Focus Adjustment Motorized Supported Resolutions 4096 x 2160 (4K); 1920 x 1200 (WUXGA); 640 x 480 (VGA); 480p/60 3840 x 2160 (UHD); 1080i/50/60; 576i/50; 2560 x 1600 (WQXGA); 1080p/24/25/30/50/60; 576p/50;	Contrast Ratio ¹	30000:1 (with dynamic co	ntrast)			
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Keystone correction	Lense Adjustment	Motorized				
Projection Factor depending on lens selection Projection Distance [m] 2 – 50 Screen Size (diagonal) [cm] / 254 / 100" - 2,540 / 1,000" [inch] Zoom Motorized Focus Adjustment Motorized Supported Resolutions 4096 x 2160 (4K); 1920 x 1200 (WUXGA); 640 x 480 (VGA); 480p/60 3840 x 2160 (UHD); 1080i/50/60; 576i/50; 2560 x 1600 (WQXGA); 1080p/24/25/30/50/60; 576p/50;	Lens shift	Up to H:±17, V:+50,-50				
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Supported Resolutions 4096 x 2160 (4K); 1920 x 1200 (WUXGA); 640 x 480 (VGA); 480p/60 3840 x 2160 (UHD); 1080i/50/60; 576i/50; 2560 x 1600 (WQXGA); 1080p/24/25/30/50/60; 576p/50;	Zoom	Motorized				
3840 x 2160 (UHD); 1080i/50/60; 576i/50; 2560 x 1600 (WQXGA); 1080p/24/25/30/50/60; 576p/50;	Focus Adjustment	Motorized				
	Supported Resolutions	3840 x 2160 (UHD); 2560 x 1600 (WQXGA);	1080i/50/60; 1080p/24/25/30/50/60;	576i/50; 576p/50;	480p/60	

Connectivity

Digital	Input: 1 x HDBaseT; 2 x DisplayPort; 2 x HDMI™ supporting HDCP; 4 x 3G-SDI		
Control	Input: 1 x D-Sub 9 pin (RS-232), Ethernet	Input: 1 x D-Sub 9 pin (RS-232), Ethernet	
Option Slot	Input: 1 x Slot for optional OPS modules		
LAN	1 x RJ45		
USB	1 x Type A (USB 2.0 high speed)		
Video Signals	NTSC; NTSC 4.43; PAL; PAL-M; PAL-N; PAL60; SECAM		

Remote Control

Input:	x 3.5 mm Stereo Mini Jack	
Remote Control	Auto Adjust; AV Mute; Direct Info; Direct Source Select; Eco Mode Control; Freeze; Full Lense control; Helpfunction; ID Select; ID set; Input Control; On Screen On/Off Selection; PBP/POP Function; PIP Function; Power (On-OFF); Select (up, down, left, right); Shutter function; Test Picture; Zoom/Focus and Lens Shift Control	

Electrical

Power Supply	200-240 V AC; 50 - 60 Hz
Power Consumption [W]	4705 Normal Mode

Mechanical

Dimensions (W x H x D) [mm]	697 x 455 x 1,180 (without lens and feet)
Weight [kg]	169
Fan Noise [dB (A)]	53 / 55 (Eco / Normal)
Colour Versions	Black

Ergonomics

Safety and Ergonomics	CE; ErP; RoHS; TüV GS		
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Additional Features

Special Characteristics	3D ready; 4K/60Hz interfaces; Cinema Quality Picture (CQP) Processing for best image quality; Edge	
	Blending Function; Free Tilt; Geometric Correction; LAN; LAN control; Lens Shift (vertical 0.55 max/0.55 max,	
	horizontal ± 0.22 max.); Light Source Adjustment; Portrait Setting; RS-232 Control; Test Pattern; Timer-	
	Function	

Green Features

Energy Efficiency	Laser Light Source
Ecological Standards	ErP compliant

Warranty

Projectors	3 years pan-European service
Light Source	3 years or 10000h (whatever comes first)

Optional Accessories

Lenses	L2K-10F1 (0.9:1); L2K-30ZM (2.71-3.89:1); L2K-43ZM1 (3.7-5.3:1); L2K-55ZM1 (4.8-7.4:1); L4K-11ZM
	(1.24-1.72:1); L4K-15ZM (1.52-2.1:1); L4K-20ZM (1.98-3.4:1)

¹ Compliance with ISO21118-2012









This product has been equipped with a laser module and is classified as Class1 of IEC60825-1 Ed3 2014 and is classified as RG3 of IEC62471-5 Ed1 2015.

DO NOT LOOK DIRECTLY INTO THE BEAM.

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