

## NC3540LS Laser Projector

## Datasheet



### The Blockbuster Cinematic experience reaches a whole new level

With the NEC NC3540LS 4K RGB laser projector, cinema is now entering a new era of projection quality. Delivering outstanding resolution and for the first time on any projection system, colours beyond the DCI or Adobe RGB specifications, your pictures will appear more vibrant and stunning than ever before. The increased colour gamut and the accuracy of the RGB laser light as well as detail-rich images thanks to the 4K resolution will create an unprecedented cinema experience. Equipped with the latest laser light source technology, cinemas benefit from a highly reliable operation providing both picture brilliance as well as highest operational safety to avoid downtime.

Thanks to the bright light output of 35,000 lumen and even 70,000 lumen when using two units in stacking installation for an outstanding 3D experience, this projector is a premium solution for larger and special Cinema screens, Theme Parks, Rental/Staging, Virtual Reality and Industrial Design.

## Benefits

**Highest Picture Quality** – full 4K resolution (4096 x 2160 pixel) and an unrivalled colour space delivers unprecedented image quality facilitating both distance and proximity viewing in the most demanding Cinema, Graphics or Theme Park applications.

**Enjoy a Lower TCO** – highest reliability, maintenance free operation, low power consumption and up to 30000 hours life; the Laser light source results in a significantly lower total cost of ownership.

**Flexible Installation** – the small projector head connected by a fibre tube to the laser source offers maximum flexibility as it can be positioned independently from the light source.

**High reliability** – the Solid Light Source provides up to 30000 hours of expected life, delivering adjustable brightness levels over a long period of time without any lamp exchange.

**Big on brightness** – the high brightness output of 35000 lumen creates outstanding images on screen sizes of up to 32 m.

**Brilliant for every purpose** – The brightness output can be individually adjusted to provide crisp images whether enjoying 2D and 3D movie playback.

**Immersive Cinema Experience** – take your theatre to the next generation, stay ahead of the competition with premium movie quality and future proof your investment for upcoming cinema trends.

## Product Information

|              |          |
|--------------|----------|
| Product Name | NC3540LS |
|--------------|----------|

|               |                 |
|---------------|-----------------|
| Product Group | Laser Projector |
| Order Code    | 60004087        |

## Optical

|                    |  |
|--------------------|--|
| Projection Method  | 3-chip DMD reflection method   |
| Screen Size [m]    | up to 32 in DCI colour (1.8 Gain screen)   |
| Brightness         | 35000 Lumen by using one Laser Source modul  |
| Contrast Ratio     | 2000:1 (full on/off)   |
| Lamp               | Lamp free design; Laser Light Source, Expected Life: 30000 h <sup>1</sup>  |
| Lens               | Zoom / Focus / Shift: Motorized<br>Shift: Horizontal/Vertical Motorized<br>Other: Dowser (light shutter); Lens memory stores lens setting (shift/zoom/focus); Range of shift is dependent on lens<br>Primary Lenses: 1.13 to 1.66:1 zoom; 1.3 to 1.85:1 zoom; 1.44 to 2.16:1 zoom; 1.63 to 2.71:1 zoom; 1.95 to 3.26:1 zoom; 2.71 to 3.89:1 zoom |
| Light Source       | External Laser Light source connected by 5m fiber tube   |
| DMD Specifications | 4096 x 2160<br>Chip: 1.38" DLP<br>Tilt Angle [°]: 12   |
| Cooling Method     | Liquid: Cooling inside, air cooling with dust-preventing electrostatic filter; Light source cooling by chiller   |

## Connectivity

|                   |   |
|-------------------|---|
| External Controls | 1 x D-Sub 37 pin (GPIO); 1 x D-Sub 15-pin (3D); 1 x D-Sub 9 pin (RS-232); 1 x D-Sub 9-pin; 1 x Remote control connector; 1 x RJ45; 1 x USB port (TypeA) |
| Input Terminals   | 2 x DVI-D (optional); 3 x USB; 4 x 3GSDI (BNC) (optional)   |

## Connectivity IMS

|                     |   |
|---------------------|---|
| External Controls   | 2 x RJ45 (4 GPI and 6 GPO); 2 x RJ45 Gigabit Ethernet                                       |
| Input Terminals     | 1 x USB Type 2.0; 2 x 3GSDI bidirectional (input and output); 2 x USB Type 3.0; eSATA; HDMI |
| Output Terminals    | 2 x RJ45 (16-channel AES3-EBU Digital Audio)  |
| Additional Features | Integrated SMS; Integrated Storage: 2 TB (DCP, RAID5); NAS support                          |

## Electrical

|                       |  |
|-----------------------|--|
| Power Supply          | Projector Power Supply Unit: 200 to 240V AC, 50/60Hz, single phase |
| Power Consumption [W] | Projector Power: 320<br>Laser Module Power: 4500 typ.              |

## Environmental Conditions

|                            |                                 |
|----------------------------|---------------------------------|
| Operating Temperature [°C] | 10 to 35; Recommended: 10 to 25 |
| Operating Humidity [%]     | 10 to 85 - non-condensing       |
| Storage Temperature [°C]   | -10 to 50                       |

## Mechanical

|                                      |   |
|--------------------------------------|---|
| External Dimensions (W x H x D) [mm] | Projector Head: 666 x 364 x 737 (excluding lens)<br>Laser module: 804 x 777 x 652   |
| Weight [kg]                          | Projector Head: 51<br>Laser module: 150   |
| Fan Noise [dB (A)]                   | < 55  |
| Regulations Europe                   | EN55022 1998, Class A; EN55024; EN55024 1998; EN55032 Class A (Marking TUV,CE); EN60950-1; EN61000-3-2; EN61000-3-2/-3-3; EN61000-3-3; IEC60950-1; IEC60950-1 / EN55022 Class A (Marking EAC) |

## External Chiller

|                             |  |
|-----------------------------|--|
| Dimensions (W x H x D) [mm] | 377 x 592 x 976                          |
| Weight [kg]                 | 67                                       |
| Power Requirements          | 200-230 V, single phase, 7 A at 230 V AC |
| Power Consumption [W]       | 1550 typ.                                |
| Noise Level [dB (A)]        | < 66                                     |

## Additional Features

|                         |   |
|-------------------------|---|
| Special Characteristics | Built-in IMS (NP90MS02-4K, optional); Flexible installation with separated laser source; High 4K resolution; Laser Light System; Low TCO; Up to 30000 h expected life time without lamp exchange; Wide laser colour space |
|-------------------------|---|

## Optional Accessories

|                      |                                       |
|----------------------|---------------------------------------|
| Optional Accessories | 4K SIB input board option; Air filter |
|----------------------|---------------------------------------|

## Warranty

|          |                         |
|----------|-------------------------|
| Warranty | 2 years, parts warranty |
|----------|-------------------------|

## Green Features

|                      |   |
|----------------------|---|
| Ecological Materials | Eliminate waste and landfill implications associated with 35mm media; Laser technology reduces power usage and reduces replacement materials required |
|----------------------|---|

<sup>1</sup> 80% of initial brightness at the end of specified laser life time.

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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