

## U321Hi (Multi-Pen) NEC Interactive Multi-Pen Projector

### Datasheet



This ultra-short throw interactive projector releases space within small to medium sized classrooms and meeting rooms, projecting onto screen sizes between 85-100" without creating shadow or glare, allowing users to get up close in comfort to interact using the Multi-Pen device.

With 1080p resolution and 10,000:1 contrast, the U321Hi Multi-Pen delivers perfect image quality for very detailed content as well as high quality movies including 3D content from Blu-Ray players, thanks to HDMI 3D support. Demanding applications in higher education such as design and engineering will appreciate the 1080p resolution for the high level of detail achieved.

### Benefits

**Great picture quality** – thanks to 1080p resolution and 10000:1 contrast.

**Almost no shadow and glare** – thanks to ultra-short throwing distance.

**Future proof connectivity** – due to numerous analog and digital connection terminals including MHL support, network capability as well as optional wireless connectivity.

**Wall-mount included** – for quick and easy installation, compatible with height adjustable systems.

**Cost effective replacement** – of existing NEC UM Series installations to achieve higher resolutions without re-positioning of the existing wall-mount.

**Multi-Pen Interactivity** – Easy and time-saving installation with auto-calibration.

**3D ready** – for playback of engaging 3D applications and movies.

**Free DisplayNote Multiuser Licence** – present, share, collaborate with up to 5 participants across multiple devices (available until March 2017).

## Product Information

|               |                                     |
|---------------|-------------------------------------|
| Product Name  | U321Hi (Multi-Pen)                  |
| Product Group | NEC Interactive Multi-Pen Projector |
| Order Code    | 60003944                            |

## Image

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Projection Technology                | 1-chip DLP™ Technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Native Resolution                    | 1920 x 1080 (FULL-HD)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Aspect Ratio                         | 16:9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Contrast Ratio <sup>1</sup>          | 10000:1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Brightness <sup>1</sup>              | 3200 ANSI Lumen (approx. 85% in Eco Mode)                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Lamp                                 | 260 W AC (220 W AC Eco Mode)                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Lamp Life [hrs]                      | 3000 (4000 Eco Mode)                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Lens                                 | F= 2.4, f= 3.72 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Lens Offset [%]                      | 65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Projection Angle [°]                 | 57                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Projection Factor                    | 0.25 : 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Projection Distance [m]              | 0.195 – 0.306                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Screen Size (diagonal) [cm] / [inch] | Maximum: 254 / 100"; Minimum: 215 / 85"                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Zoom                                 | Digital Zoom                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Focus Adjustment                     | Manual                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Supported Resolutions                | 1920 x 1080 (HDTV 1080i/60; HDTV 1080i/50); 1680 x 1050 (WSXGA+); 1600 x 1200 (UXGA); 1600 x 900 (WXGA++); 1440 x 900 (WXGA+); 1400 x 1050 (SXGA+); 1366 x 768 (WXGA); 1360 x 768 (WXGA); 1280 x 1024 (SXGA); 1280 x 1024 (MAC 23"); 1280 x 960 (SXGA); 1280 x 800 (WXGA); 1280 x 768 (WXGA); 1280 x 720 (HDTV 720p); 1152 x 870 (MAC 21"); 1152 x 864 (XGA); 1024 x 768 (XGA); 832 x 624 (MAC 16"); 800 x 600 (SVGA); 720 x 576 SDTV 480p/480i; 720 x 480 SDTV 576p/576i; 640 x 480 (VGA/MAC 13") |
| Frequency                            | Horizontal: 15–100 kHz (RGB: 24 kHz– 100 kHz); Vertical: 50 – 120 Hz                                                                                                                                                                                                                                                                                                                                                                                                                               |

## Connectivity

|               |                                                                                                      |
|---------------|------------------------------------------------------------------------------------------------------|
| RGB (analog)  | Input: 1 x Mini D-sub 15-pin, compatible to component (YPbPr)<br>Output: 1 x Mini D-sub 15 pin       |
| Digital       | Input: 1 x HDMI™ (Deep Color, Lip sync); 1 x HDMI™ with MHL support                                  |
| Video         | Input: 1 x RCA                                                                                       |
| Audio         | Input: 1 x 3.5 mm Stereo Mini Jack; 1 x RCA Stereo<br>Output: 1 x 3.5 mm Stereo Mini Jack (variable) |
| Control       | Input: 1 x D-Sub 9 pin (RS-232) (male)                                                               |
| LAN           | 1 x RJ45                                                                                             |
| USB           | 1 x Mini USB; 1 x Type A (USB 2.0 high speed)                                                        |
| Video Signals | NTSC; NTSC 3.58; NTSC 4.43; PAL; PAL-M; PAL-N; PAL60; SECAM                                          |

## Remote Control

|                |                                                                                                                                                                                     |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Remote Control | Aspect Ratio; Audio Control; Auto Adjust; AV Mute; Digital Zoom; Direct Source Select; Freeze; Help Eco Mode; Help-function; ID set; Picture Adjust; Presentation and Mouse Control |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Electrical

|                       |                                                                    |
|-----------------------|--------------------------------------------------------------------|
| Power Supply          | 100-240 V AC; 50 - 60 Hz                                           |
| Power Consumption [W] | 312 (Normal) / 264 (Eco) / 2.2 (Network Stand-by) / 0.3 (Stand-by) |

## Mechanical

|                             |                                        |
|-----------------------------|----------------------------------------|
| Dimensions (W x H x D) [mm] | 383 x 85 x 308 (without lens and feet) |
| Weight [kg]                 | 4.7                                    |
| Fan Noise [dB (A)]          | 29 / 34 (Eco / Normal)                 |

## Environmental Conditions

|                            |                         |
|----------------------------|-------------------------|
| Operating Temperature [°C] | 5 to 40                 |
| Operating Humidity [%]     | 20 to 80 non-condensing |
| Storage Temperature [°C]   | -20 to 60               |
| Storage Humidity [%]       | 20 to 90 non-condensing |

## Ergonomics

|                       |                          |
|-----------------------|--------------------------|
| Safety and Ergonomics | CE; Gost-R; RoHS; TÜV GS |
| Speakers [W]          | 1 x 8 (mono)             |

## Additional Features

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Special Characteristics | 3D ready; AMX Beacon; Auto Eco Mode; Auto Power ON/OFF; Crestron RoomView; DICOM Simulation; Direct Power-Off Function; High Altitude Mode; Kensington security slot; Keypad Lock; Magnify; Manual vertical Keystone Correction ( $V = \pm 5^\circ$ ); NaViSet Administrator 2; Off-Timer; Optional User Logo; OSD with 30 languages; Password Security System; PJ LINK; Quick On/Off; Remote control and administration via LAN and RS232; Security Bar; Test Pattern; Wall Colour Correction |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Green Features

|                      |                                                                |
|----------------------|----------------------------------------------------------------|
| Ecological Materials | 100% recyclable packaging; Downloadable manuals; ECO packaging |
| Ecological Standards | ErP compliant; RoHs compliant                                  |

## Warranty

|              |                              |
|--------------|------------------------------|
| Projectors   | 3 years pan-European service |
| Light Source | 6 months, max. 1000 hrs      |

## Shipping Content

|                   |                                                                                                                                                                                                               |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shipping Contents | Attachment Plate; Interactive Module incl. 2 pens (NP04Wi); IR Remote Control (RD469E); Mini D-SUB Signal Cable (1.8 m); Power Cord; Quick Setup Guide; Security Sticker; Users Manual; Wall-mount kit NP04WK |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Optional Accessories

|                      |                                                                                                  |
|----------------------|--------------------------------------------------------------------------------------------------|
| Optional Accessories | 3D Starter Kit (NP02SK3d); DisplayNote; DLP-Link 3D Glasses (NP02GL, Volfoni-Fit); Lamp (NP34LP) |
|----------------------|--------------------------------------------------------------------------------------------------|

<sup>1</sup> Compliance with ISO21118-2012



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