

User's Manual

All-in-One Collaboration Solution

NEC 55" InfinityBoard® 2.1

Contents

- Addendum information
- Important information
- Safety precautions, maintenance, and recommended use
- Shipping box contents
- Unpacking the monitor
- Mounting the monitor
- Installing the soundbar and OPS
- Setting up the OPS slot-in PC
- 55" InfinityBoard[®] 2.1 specifications
- Manufacturer's Recycling and Energy Information

Large Format Display Models

• IB554Q-2.1

NOTE: Please find your model name on the label on the rear side of the monitor.

October 1, 2021 Revision 1.1 Sharp NEC Display Solutions

Addendum information

This user's manual is an addendum to the standard user's manual of the base model monitor V554Q.

All specifications listed here supersede those in the standard version of the manual included with this monitor.

NOTE: Following feature sets are not supported by the InfinityBoard[®] models:

- **Table Top Stand Option**: The NEC InfinityBoard[®] version of the base monitor model does not allow for table top installations as the table top brackets have been removed.
- **Room Light Sensing Sensor**: The NEC InfinityBoard[®] version of the base monitor model does not allow the monitor to make automatic adjustments to the backlight setting.
- **Intelligent Wireless Data Sensor**: The NEC InfinityBoard[®] version of the base monitor model does not include a sensor for wireless communication to the monitor for information and settings.
- **NEC ornament logo**: The NEC InfinityBoard[®] version of the base monitor model does not have an ornament logo. Therefore, changing the position of the NEC logo is not possible.

Important information



A WARNING: To prevent fire or shock hazards, do not expose this unit to rain or moisture.

Do not connect or disconnect this product during an electrical storm.

Also, do not use this unit's polarized plug with an extension cord receptacle or other outlets unless the prongs can be fully inserted.

Refrain from opening the cabinet as there are high voltage components inside. Refer servicing to qualified service personal.

ullet CAUTION: To reduce the risk of electric shock, make sure the power cord is unplugged from the wall socket.

To fully disengage the power to the unit, please disconnect the power cord from the AC outlet.

Do not remove cover (or back). No user serviceable parts inside.

Refer servicing to qualified service personnel.

Please use the power cord provided with this display in accordance with the power cord table. If a power cord is not supplied with this equipment, please contact NEC. For all other cases, please use the power cord with the plug style that matches the power socket where the monitor is located. The compatible power cord corresponds to the AC voltage of the power outlet and has been approved by, and complies with, the safety standards in the country of purchase.

This equipment is designed to be used in the condition of the power cord connected to the earth. If the power cord is not connected to the earth, it may cause electric shock. Please make sure the power cord is earthed properly.



This symbol warns user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any part inside this unit.

This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

Plug Type	North America	European Continental	U.K.	Chinese	Japanese
Plug Shape	The second secon		S ADA	- Ali	
Region	U.S.A./Canada	EU	U.K.	China	Japan
Voltage	120*	230	230	220	100

* When operating the MultiSync monitor with its AC 125-240V power supply, use a power supply cord that matches the power supply voltage of the AC power outlet being used.

NOTE: This product can only be serviced in the country where it was purchased.

- The intended primary use of this product is as an Information Technical Equipment in an office or domestic environment.
- The product is intended to be connected to a computer and is not intended for the display of television broadcast signals.

CE

Copyright Information

Windows is a registered trademark of Microsoft Corporation.

NEC is a registered trademark of NEC Corporation.

MultiSync is a trademark or registered trademark of NEC Display Solutions, Ltd. in Japan and other countries. ErgoDesign is a registered trademark of NEC Display Solutions, Ltd. in Austria, Benelux, Denmark, France, Germany, Italy, Norway, Spain, Sweden, U.K.

DisplayPort and DisplayPort Compliance Logo are trademarks owned by Video Electronics Standards Association in the United States and other countries.

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.

Trademark PJLink is a trademark applied for trademark rights in Japan, the United States of America and other countries and areas.

microSD and microSD SDHC logos are trademarks of SD 3C, LLC.

CRESTRON and CRESTRON ROOMVIEW are trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and other countries.

Raspberry Pi is a trademark of the Raspberry Pi Foundation.

Adobe and the Adobe logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

All other brands and product names are trademarks or registered trademarks of their respective owners.

NOTE: (1) The contents of this user's manual may not be reprinted in part or whole without permission.

(2) The contents of this user's manual are subject to change without notice.

(3) Great care has been taken in the preparation of this user's manual; however, should you notice any questionable points, errors or omissions, please contact us.

(4) The image shown in this user's manual is indicative only. If there is inconsistency between the image and the actual product, the actual product shall govern.

(5) Notwithstanding articles (3) and (4), NEC will not be responsible for any claims on loss of profit or other matters deemed to result from using this device.

GPL/LGPL Software Licenses

The product includes software licensed under GNU General Public License (GPL), GNU Lesser General Public License (LGPL), and others. For more information on each software, see "readme.pdf" inside the "about GPL&LGPL" folder on the supplied CD-ROM.

Registration information

Cable Information

CAUTION: Use the provided specified cables with this product so as not to interfere with radio and television reception. For mini D-Sub 15-pin, please use a shielded signal cable with ferrite core.

For HDMI, DisplayPort, USB and D-Sub 9-pin, please use a shielded signal cable.

Use of other cables and adapters may cause interference with radio and television reception.

FCC Information

- ▲ WARNING: The Federal Communications Commission does not allow any modifications or changes to the unit EXCEPT those specified by NEC Display Solutions of America, Inc. in this manual. Failure to comply with this government regulation could void your right to operate this equipment.
- 1. The power supply cord you use must have been approved by and comply with the safety standards of U.S.A., and meet the following condition.



- 2. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.











- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

If necessary, the user should contact the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet, prepared by the Federal Communications Commission, helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

SUPPLIER'S DECLARATION OF CONFORMITY

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions. (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

U.S. Responsible Party:	NEC Display Solutions of America, Inc.
Address:	3250 Lacey Rd, Ste 500
	Downers Grove, IL 60515
Tel. No.:	(630) 467-3000
Type of Product:	Display Monitor
Equipment Classification:	Class B Peripheral
Model:	MultiSync IB554Q-2.1



To see a list of our TCO certified monitors and their TCO Certification (in English only), visit our website at: https://www.nec-display.com/global/about/legal_regulation/TCO_mn/index.html

Safety precautions, maintenance, and recommended use

Safety precautions and maintenance

Refer to the monitor's full user's manual for complete safety and maintenance instructions.

Cleaning the glass surface

- The glass surface should be cleaned regularly with a soft, lint-free cloth.
- It is recommended to use an anti-static plastic and glass cleaner suited for PMMA/acrylic glass/Plexiglas, or water with a small amount of washing-up liquid.

Cleaning the cabinet

To clean the cabinet, dampen the cloth with a neutral detergent and water, wipe the cabinet and follow with a dry cloth.

- 1. Unplug the power supply.
- 2. Gently wipe the cabinet with a soft cloth.
- **NOTE:** DO NOT clean with benzene thinner, alkaline detergent, alcoholic system detergent, wax, polish cleaner, soap powder, or insecticide. Rubber or vinyl should not be in contact with the cabinet for an extended period of time. These types of fluids and materials can cause paint to deteriorate, crack, or peel.

Shipping box contents

55" InfinityBoard® 2.1

- FlatFrog InGlass[™] Touch Display (V554Q IGB)
- OPS Slot in PC (OPS-Kbl-i7v-d8/128/W10Pro/W/TPM/Infinity)
- Collaboration Soundbar incl. Huddly IQ Camera (SP-PSCM-55IB-IQ)
- Soundbar Bracket (SP-Bracket 55IB 2.0)
- 2x Passive Magnetic Pen
- Remote Control
- CD ROM (User Guides/Manuals)
- Addendum to User's Manuals
- Power Cable
- DisplayPort Cable
- 2x USB Cable 300cm
- USB Cable 10cm
- Cable Clamps

Unpacking the monitor

Unpack the display (V554Q IGB) from the carton box by removing the white clips on the bottom of the box.

▲ **CAUTION:** Due to the weight of the product, for installation and handling, four people are required. DO NOT start unless you have enough people available. Working with fewer people may result in injuries and damaged the product.

Lift the carton box upwards. Make sure to have one additional person to secure the display from tipping over.

NOTE: Remember to save your original box and packing material to transport or ship the monitor.

For further instructions, please refer to the printed instructions on the carton box.



Mounting the monitor

This device cannot be used or installed without a mounting accessory for support. DO NOT mount the monitor yourself. For proper installation it is strongly recommended to use a trained, qualified technician. Please contact your supplier as they may be able to provide a list of qualified installation professionals. Mounting on a wall or ceiling and hiring a technician is the customer's responsibility.

Carefully inspect the location where the unit is to be mounted. Not all walls or ceilings are capable of supporting the weight of the unit. Product warranty does not cover damage caused by improper installation, re-modeling, or natural disasters. Failure to comply with these recommendations could result in voiding the warranty. Please refer to the specification table (page 17) for the monitor weight.

DO NOT block ventilated openings with mounting accessories or other accessories.

For customers



DO NOT mount the monitor yourself.

After installation maintenance

- Periodically check for looses screws, gaps, distortions, or other problems that may occur with the mounting equipment. If a problem is detected, please refer to qualified personnel for service.
- Regularly check the mounting location for signs of damage or weakness that may occur over time.

For NEC qualified personnel

Stability hazard

To prevent personal injury and damage to the monitor, the monitor must be securely attached to the floor/wall in accordance with the installation instructions. If the monitor is not properly mounted and secured, it may fall, causing serious personal injury or death. To ensure a safe installation, use two or more brackets to mount the unit to at least two points on the installation location.

NOTE: For optimum performance of the touch screen technology, the monitor must be completely level. The monitor and touch screen only work correctly when the monitor is in the straight-upright or tilted-back position. If the monitor tilts to the front, it results in a convex position of the glass and might negatively impact the touch performance.



Convex position of glass

For further instructions, please refer to the base monitor model's full user's manual, which is available online at www.necdisplay.com.

Installing the soundbar and OPS

This section includes:

- ⇒ "Parts list" on page 10
- \Rightarrow "Mount the soundbar to the monitor" on page 11
- ⇒ "Install the OPS slot-in PC" on page 12
- ⇒ "Connect the cables" on page 13

Parts list

Part	Quantity	Description	Part	Quantity	Description
A	1	Monitor	D	4	M4 x 12 screws
B	1	Soundbar	E	4	Washers
С	1	Soundbar bracket		1	OPS Slot-in PC

Mount the soundbar to the monitor



Install the OPS slot-in PC



1. Write down the Windows 10 license code; this key is required to activate Windows.

The code is located on the rear-side of the OPS slot-in PC.

- 2. Turn off the main power switch on the monitor.
- 3. Attach the antennas to the OPS.
- 4. Remove the attached slot cover by unscrewing the installed screws, then slide the cover to the right and remove it.
- Insert the OPS slot-in PC into the monitor, and then fasten it in place with the screws removed in step 4. (Recommended Fasten Force: 139 -189N•cm)
- **NOTE:** Do not apply excessive force when inserting the OPS and fastening it with screws. If the OPS cannot be fully inserted, or if its bracket does not align with the screw holes in the monitor, make sure that it is inserted in the correct orientation.
- ▲ **CAUTION:** Ensure the OPS slot-in PC is securely attached with the screws. If the OPS is not securely installed, it may fall out and expose you to danger.











Connect the cables

- **NOTE:** Do not connect or disconnect cables when turning on the monitor's main power or other external equipment's power as this may result in a loss of image.
 - Do not use an attenuating (built-in resistor) audio cable. Using an audio cable with a built-in resistor will lower the sound level. Use an audio cable without a built-in resistor.

We recommend turning off the monitor's main power before connecting the speakers, external devices, or USB cables.



1. Connect the USB hub

- Connect one end of the 10cm USB cable, supplied with the monitor, to the USB Type-B input marked with "Hub," located above the external speaker terminals. Connect the other end to the USB Type-A input marked with "USB 1".
- The red LED on the USB hub will light up.
- **NOTE:** If connecting to an external PC, use the 3m USB cable supplied with the monitor. Connect the USB cable to the USB Type-B input marked with "Hub" to a USB Type-A input in the external PC.

2. Connect the external speakers

- Connect the audio cables to the terminals on each speaker and to the speaker terminals on the side of the InfinityBoard[®].
- The red terminal is plus (+), and the black terminal is minus (-).





English-13

3. Activate the external speakers

• To enable the speakers, push the "Internal/External speaker switch" below the speaker terminals.

4. Enable the touch function (external PC)

- When used with an OPS slot-in PC, no external USB cable is needed to activate the touch function.
- **NOTE:** If connecting to an external PC, use the 3m USB cable supplied with the monitor. Connect the USB Type-B input marked with "Touch" to a USB Type-A input in the external PC.

5. Connect the Huddly camera

• Connect the camera's USB cable to the USB input on the OPS slot-in PC.



- **NOTE:** If connecting to an external PC, NEC can provide the Huddly certified USB extension cable to connect the huddly camera to the external PC.
- 6. **Enable power to the OPS** (skip this step if using an external PC)

If you are using the OPS slot-in PC, the function for the monitor to supply power to the OPS needs to be enabled.

- Press the **MENU** button on the IR remote control to open the OSD.
- Navigate to the [OPTION] menu and under [OPTION POWER] select [AUTO].





This section includes:

- ⇒ "Installing Windows 10" on page 15
- ⇒ "Selecting the speaker" on page 16

Installing Windows 10

- 1. Press the **OPTION** button on the IR remote control to change the video input to the OPS slot-in PC.
- 2. Follow the Windows installation process.
- 3. Activate Windows using the code provided with the OPS slot-in PC. (See step 1 in "Install the OPS slot-in PC" on page 12)
- 4. When activation is complete, you will see the following screen:



- FlatFrog Whiteboard (permanent license)
- Microsoft OneNote
- Huddly App for camera control
- Hoylu Suite: Flow, Sketch, Paper (single screen license)

For further information please visit: <u>https://hoylu.com/</u> or <u>contact hello@hoylu.com</u>.

Selecting the speaker

1. Open the **Sound** settings in Windows by clicking on the speaker icon in the Windows task bar.



2. Open the **Playpack** tab in the **Sound** settings and select the V554Q monitor as the **Default Device**. This will enable the soundbar.

Sound							×
Playback	Recording	Sounds	Commu	inications	5		
Select a	playback dev	vice below	to modi	fy its sett	ings:		
Spi 2-	eakers High Definiti abled, unplu	on Audio laaed	Device				
Spr 2- Dis	eakers High Definiti abled	on Audio	Device				
Dig 2- Dis	gital Audio (S High Definiti abled	on Audio	Device				
Spo 2- Dis	eakers Phnx MT107 abled	a					
V5	54Q el(R) Display fault Device	Audio					
Confi	gure			Set De	fault 💌	Propertie	25
			ОК		Cancel	App	oly

NOTE: We recommend disabling all other speaker options.

Selecting a Microphone

Open the "Recording" tab in the "Sound" settings and select the external microphone of your choice.

55" InfinityBoard[®] 2.1 specifications

Product information					
Product name	NEC 55" InfinityBoard [®] 2.1				
Product group	LCD 55" all-in-one collaboration solution				
Order code	40001353				
Display					
Panel technology	IPS with edge LED backlights				
Active screen area (W x H)	1,209.6 mm x 680.4 r	nm			
Screen size	55 inches / 138.78 cm	n diagonal			
Brightness	500 cd/m ² (shipment	setting: 350)			
Contrast ratio (typ.)	1100:1				
Viewing angle	178º / 178º (at contra	ast ratio > 10:1)			
Color depth	1,073,741,824 (10-bit				
Response time	8 ms (grey-to-grey ty	p.)			
Haze level	Pro (28%)				
Supported orientation	Face-up, landscape, p	ortrait			
Synchronization rate	· · · · · · · · · · · · · · · · · · ·				
Horizontal frequency (kHz)	26 to 135				
Vertical frequency (Hz)	23 to 86				
Resolution					
Native resolution	3840 x 2160				
Supported resolutions	4096 x 2160	1650 x 1050	1366 x 768	1024 x 768	
	1920 x 2160	1600 x 1200	1360 x 768		
	1920 x 1200	1440 x 900	1280 x 1024		
	1920 x 1080	1400×1050	1280 x 720		
Connectivity	1920 × 1000	1100 x 1000	1200 x 720		
Input video (digital)	x1 OPS slot, DisplayPo	ort x2 (with HDCP), HD	MI x3 (with HDCP)		
Input audio (analog)	3.5 mm jack				
Input audio (digital)	DisplayPort, HDMI				
Input control	LAN 100Mbit, remote	control (3.5 mm jack).	RS232		
Input data	microSD (Media Plave	r), USB 2.0 (downstrea	m), USB 2.0 (Media Pla	aver), USB type-B	
	(upstream), USB 2.0 x	x2 (Compute Module, 5	V/2A powered x1)	.,,	
Output video (digital)	DisplayPort x1 (loop t	hrough: DisplayPort, Of	PS slot-in PC)		
Output audio (analog)	3.5 mm jack				
Output control	LAN 100Mbit				
Open modular intelligence					
OPS slot technology	Open pluggable specif	ication (NEC / Intel OP	S standard)		
OPS max. current	4.7 A				
OPS power consumption	75 W				
Compute Module technology	Compute Module slot (NEC proprietary standard)				
Sensors					
Human sensor	Optional, external, 4-	5m range, triggered act	ions programmable		
Temperature sensor	Integrated, 3 sensors,	, triggered actions prog	rammable		
Electrical					
Power consumption	132 Eco (shipment se	tting) 182W			
Power savings mode	<0.5W, <2W (networked standby)				
Power management	VESA DPMS				
Environmental conditions					
Operating temperature	0°C to 40°C				
Operating humidity	20% to 80%				
Mechanical					
Dimensions (W x H x D)	1284.5 mm x 877.3 m	nm x 90.6 mm			
Weight	46.82 kg (103.22 lbs)				

Rozal width	19.4 mm (left and right) 19.4 mm (tan and bettem)			
VESA mounting	M8 4 holes configuration 400 mm x 400 mm (EDMI) or 600 mm x 400 mm (EDMI)			
	IDEx (front) ID2x (back)			
	Pox 1: 1 420 mm x 020 mm x 250 mm Pox 2: 1 400 mm	<u>v 260 mm v 260 mm</u>		
Package uniensions (W X H X D)	Box 1: 1,450 mm x 920 mm x 250 mm Box 2: 1,400 mm	x 250 IIIIII x 250 IIIIII		
	B0x 1: 46.3 kg B0x 2: 9.6 kg			
Thicknoss	2 mm			
Tripo	Dramium taughanad glass, anti glara spating			
Light transmission				
Touch	88% (11%)			
	InGlass™ Touch			
Number of touches	Real multi-touch up to 20 touches			
Response time	< 15 ms			
Touch method	Finger gloves stylus (> 2 mm)			
Supported operating systems	Native multi-touch: Windows 7 Windows 8 Windows 10 Linux	Android		
Supported operating systems	Default mouse: Windows XP, Windows Vista, macOS X	Android		
Data interface	USB-HID			
Accuracy	< 1 mm			
Media Player				
Supported image formats	JPG (baseline, progressive, RGB, CMYK), max res: 5000 x 5000 PNG (interlace, alpha channel), max res: 4000 x 4000			
Supported video formats	MP4 / MOV / FLV (video H.264, audio MP3/AAC), max. res. 1080 MPG (video 1/2, audio mpeg audio layer 2/3, AAC-LC), MP@ML, WMV (video H.264, wmv advanced L3, wmv simple / main, audi res. 1080p @ 30Hz / 1080i @ 60Hz	Dp @ 30Hz / 1080i @ 60Hz MP@HL o mp3, wmv std), max.		
Supported audio formats	MP3 (MP3), max. bit-rate 320 kBit/s WAV (LPCM), max. 48kHz sampling			
Supported file storp go/sustam				
Supported me storage/system	FAI16, FAI32			
Video conference camera	FAT16, FAT32			
Video conference camera Viewing angle	FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical			
Video conference camera Viewing angle Resolution (megapixels)	FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps			
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio	FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9			
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities	FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom			
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver	FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install			
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity	FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB			
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software	 FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software	 FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Input	 FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Input Rated speaker impedance	 FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Input Rated speaker impedance Frequency response rate	 FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Input Rated speaker impedance Frequency response rate Sound pressure level	 FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 82.1dB (2.83 V) 	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Input Rated speaker impedance Frequency response rate Sound pressure level Microphone / Echo-Canceling	 FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 82.1dB (2.83 V) 	video scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Input Rated speaker impedance Frequency response rate Sound pressure level Microphone / Echo-Canceling Frequency (kHz)	 FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 82.1dB (2.83 V) 32, sampling frequency 	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Input Rated speaker impedance Frequency response rate Sound pressure level Microphone / Echo-Canceling Frequency (kHz) Bandwidth (Hz - kHz)	 FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 82.1dB (2.83 V) 32, sampling frequency 100 to 16 	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Conference speakers Input Rated speaker impedance Frequency response rate Sound pressure level Microphone / Echo-Canceling Frequency (kHz) Bandwidth (Hz - kHz) Echo canceling	FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 82.1dB (2.83 V) 32, sampling frequency 100 to 16 2 levels of echo canceling, aggressiveness and 3 levels of echo c	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Conference speakers Input Rated speaker impedance Frequency response rate Sound pressure level Microphone / Echo-Canceling Frequency (kHz) Bandwidth (Hz - kHz) Echo canceling Controllable teil length (mms)	FA116, FA132 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 82.1dB (2.83 V) 32, sampling frequency 100 to 16 2 levels of echo canceling, aggressiveness and 3 levels of echo complexity of the section of the	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Conference speakers Input Rated speaker impedance Frequency response rate Sound pressure level Microphone / Echo-Canceling Frequency (kHz) Bandwidth (Hz - kHz) Echo canceling Controllable teil length (mms) Noise suppression	FA116, FA132 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 82.1dB (2.83 V) 32, sampling frequency 100 to 16 2 levels of echo canceling, aggressiveness and 3 levels of echo compression of echo compression of echo compression of echo prevention echo prevention of echo prevention echo preven	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Conference speakers Input Rated speaker impedance Frequency response rate Sound pressure level Microphone / Echo-Canceling Frequency (kHz) Bandwidth (Hz - kHz) Echo canceling Controllable teil length (mms) Noise suppression Pre-set color filters	FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 82.1dB (2.83 V) 32, sampling frequency 100 to 16 2 levels of echo canceling, aggressiveness and 3 levels of echo canceling, aggressiveness and 3 levels of echo canceling 8 pre-set color filters for both the output and the speaker signal	rideo scaling and ust automatic white canceling speed		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Conference speakers Input Rated speaker impedance Frequency response rate Sound pressure level Microphone / Echo-Canceling Frequency (kHz) Bandwidth (Hz - kHz) Echo canceling Controllable teil length (mms) Noise suppression Pre-set color filters Delay (msec)	FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 82.1dB (2.83 V) 32, sampling frequency 100 to 16 2 levels of echo canceling, aggressiveness and 3 levels of echo compressed to environment noise level to prevent 8 pre-set color filters for both the output and the speaker signal 10	rideo scaling and ust automatic white canceling speed		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Conference speakers Input Rated speaker impedance Frequency response rate Sound pressure level Microphone / Echo-Canceling Frequency (kHz) Bandwidth (Hz - kHz) Echo canceling Controllable teil length (mms) Noise suppression Pre-set color filters Delay (msec) Mic level (mV)	FAT16, FAT32 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 82.1dB (2.83 V) 32, sampling frequency 100 to 16 2 levels of echo canceling, aggressiveness and 3 levels of echo conceling, aggressiveness and 3 levels of echo conceling, 8 pre-set color filters for both the output and the speaker signal 10 280 peak-to-peak	rideo scaling and ust automatic white		
Video conference camera Viewing angle Resolution (megapixels) Aspect ratio Optical capabilities Driver Connectivity Software Conference speakers Input Rated speaker impedance Frequency response rate Sound pressure level Microphone / Echo-Canceling Frequency (kHz) Bandwidth (Hz - kHz) Echo canceling Controllable teil length (mms) Noise suppression Pre-set color filters Delay (msec) Mic level (mV) Line level (V)	FA116, FA132 150° diagonal / 120° horizontal / 90° vertical Sensor 16; Output 720p 30fps 16:9 Digital pan / tilt / zoom with 3x lossless digital zoom Plug&Play, driver-less install SuperSpeed USB 3DNR sensor-model-based visual noise reduction, high-quality v de-warping flicker elimination, optical aberration correction, rob balance, spatio-temporal noise filtering 40 W max. 8Ω 70Hz to 15kHz 82.1dB (2.83 V) 32, sampling frequency 100 to 16 2 levels of echo canceling, aggressiveness and 3 levels of echo conceling, aggressiveness and 3 levels of echo conceling, 8 pre-set color filters for both the output and the speaker signal 10 280 peak-to-peak 2/4 peak-to-peak	rideo scaling and ust automatic white		

OPS slot-in PC	
CPU	Intel [®] Core i7, 8M cache 4x3 Ghz
Graphics	Intel [®] HD graphics 630
SSD	SATA SSD (Msata) 2Gb/s (MLC), 128 GB
RAM	8 GB (DDR4), dual channel mode
Operating system	Microsoft Windows 10 Professional
Interfaces (frontside)	x1 micro sim card, x1 USB 2.0, x1 USB 3.1 Gen 1 Type-C, x2 antenna for Wi-Fi, x2 DisplayPort 1.2++, x2 USB 3.0, RJ-45 10/100/1000 Mbps
Interfaces (backside)	Internal HDMI 1.4 or DisplayPort 1.2, internal OPS interface to OPS slot-in PC (JAE 80-pin connector)
Wi-Fi	Intel Dual Band Wireless-AC 8260 802.11ac, dual band, Wi-Fi and Bluetooth 4.2 adapter
Security	TPM (Trusted Platform Module)
EDID/DDC support	Internal OPS interface DisplayPort up to 4096 x 2160 @ 60hz
Available optional accessories	
Cart	SmartMount [®] Motorized Height Adjustable Flat Panel Cart
Compute module	NEC Compute Module Interface Board with NEC Raspberry Pi Compute Module NEC Compute Module Interface Board with Raspberry Pi Compute Module 1 or 3
Green features	
Energy efficiency	ECOMode, Energy efficiency class B, Human sensor, LED back-light
Additional features	
Special characteristics	12-bit LUT (Look Up Table), AMX NetLinx support, ASCII control commands, auto ID assignment, auto-tiling function, automated email alert, CEC support, Cisco WebEx kit compatible, CRESTRON connected support, DICOM simulation, display browser control, emergency notification, HDMI with UHD at 60Hz, HDR gamma support (HLG, PQ), key guide, Media Player with browser control, NaViSet Administrator 2, OmniColor control, OSD rotation, PIN theft protection, PJLink support, powered USB port, removable logo, scheduler, slim LED indicator, SNMP support, TileMatrix (10x10), user readable log
Safety and ergonomics	CE, EAC, EMC Class B, FCC, RCM, REACH, RoHS, UL/C-UL
Pixel failure class	ISO 9241-307, Class 1
Audio	Integrated speakers (10W + 10W)
Shipping content	x1 10 cm USB cable, x2 stylus, x2 300 cm USB cable, cable clamps, collaboration soundbar, display, DisplayPort cable, HDMI cable, OPS Slot-in PC, power cable, remote control, user manual
Warranty	3-years including backlight, optional 4 + 5 year warranty extension.
Operating hours	24/7

NOTE: Technical specifications are subject to change without notice.

Manufacturer's Recycling and Energy Information

We are strongly committed to environmental protection and sees recycling as one of the company's top priorities in trying to minimize the burden placed on the environment. We are engaged in developing environmentally-friendly products, and always strive to help define and comply with the latest independent standards from agencies such as ISO (International Organization for Standardization) and TCO (Swedish Trades Union).

Disposing of your old NEC product

The aim of recycling is to gain an environmental benefit by means of re-use, upgrading, reconditioning or reclamation of material. Dedicated recycling sites ensure that environmentally harmful components are properly handled and securely disposed. To ensure the best recycling of our products, we offer a variety of recycling procedures and gives advice on how to handle the product in an environmentally sensitive way, once it has reached the end of its life.

All required information concerning the disposal of the product and country-specific information on recycling facilities can be found on our following websites:

https://www.sharpnecdisplays.eu/p/greenvision/en/greenvision.xhtml (in Europe)

https://www.sharp-nec-displays.com/jp/ (in Japan)

https://www.sharpnecdisplays.us/ (in USA)

Energy Saving

This monitor features an advanced energy saving capability. When a Display Power Management signal is sent to the monitor, the Energy Saving mode is activated. The monitor enters a single Energy Saving mode. For additional information visit:

For additional information visit:

https://www.sharpnecdisplays.us/ (in USA)

https://www.sharpnecdisplays.eu/p/hq/en/home.xhtml (in Europe)

https://www.sharp-nec-displays.com/global/index.html (Global)

For Energy Saving information: [Default setting: Quick recovery Off] For ErP requirement/For ErP (Network standby) requirement:

Exceptions to the power	The monitor is using an Option Board.
consumption conditions below:	[INPUT DETECT] is set to a setting other than [NONE].
	[USB POWER] is set to [ON].
	DisplayPort in the [TERMINAL SETTINGS] is set to [MST].

Power consumption (Glowing amber): 2.0 W or less (with 1 port connection)/3.0 W or less (with all ports connection).

Time for power management function: 10 sec. (Default setting)

Power consumption (Blinking amber): 0.5 W or less.

Time for power management function: 3 min. (Default setting) (Except for a condition that the monitor has plural signal inputs.)

WEEE Mark (European Directive 2012/19/EU and amendments)

Disposing of your used product: In the European Union



EU-wide legislation as implemented in each Member State requires that used electrical and electronic products carrying the mark (left) must be disposed of separately from normal household waste. This includes monitors and electrical accessories, such as signal cables or power cords. When you dispose of such products, please follow the guidance of your local authority or ask the shop where you purchased the product, or if applicable, follow applicable legislation or agreement you may have. The mark on electrical and electronic products may only apply to the current European Union Member States.

Outside the European Union

If you wish to dispose of used electrical and electronic products outside the European Union, please contact your local authority and ask for the correct method of disposal.