

# US3311

2-Port 4K DisplayPort USB-C KVM Dock Switch with Power Pass-Through User Manual

## **Compliance Statements**

# FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital service, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy. 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.

The device complies with Part 15 of the 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.

**FCC Caution:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.



#### KCC Statement

유선 제품용 / B 급 기기 ( 가정용 방송 통신 기기 ) 이 기기는 가정용 (B 급 ) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며 , 모든 지역에서 사용할 수 있습니다 .

#### **Industry Canada Statement**

This Class B digital apparatus complies with Canadian ICES-003.

### CAN ICES-003 (B) / NMB-003 (B)

#### RoHS

This product is RoHS compliant.

## **User Information**

#### **Online Registration**

Be sure to register your product at our online support center:

International	http://eservice.aten.com
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#### **Telephone Support**

For telephone support, call this number:

International	886-2-8692-6959
China	86-400-810-0-810
Japan	81-3-5615-5811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988
	1-949-428-1111

#### **User Notice**

All information, documentation, and specifications contained in this manual are subject to change without prior notification by the manufacturer. The manufacturer makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties as to merchantability or fitness for any particular purpose. Any of the manufacturer's software described in this manual is sold or licensed *as is*. Should the programs prove defective following their purchase, the buyer (and not the manufacturer, its distributor, or its dealer), assumes the entire cost of all necessary servicing, repair and any incidental or consequential damages resulting from any defect in the software.

The manufacturer of this system is not responsible for any radio and/or TV interference caused by unauthorized modifications to this device. It is the responsibility of the user to correct such interference.

The manufacturer is not responsible for any damage incurred in the operation of this system if the correct operational voltage setting was not selected prior to operation. PLEASE VERIFY THAT THE VOLTAGE SETTING IS CORRECT BEFORE USE.

## **Product Information**

For information about all ATEN products and how they can help you connect without limits, visit ATEN on the Web or contact an ATEN Authorized Reseller. Visit ATEN on the Web for a list of locations and telephone numbers:

International	http://www.aten.com
North America	http://www.aten-usa.com

#### **Package Contents**

Check to make sure that all the components are in working order. If you encounter any problem, please contact your dealer.

1 US3311 2-Port 4K DisplayPort USB-C KVM Dock Switch with Power

Pass-Through

- 1 power adapter
- 2 USB-C cables
- 1 port switch button
- 1 user instructions

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## About this Manual

This user manual is provided to help you get the most from the US3311 unit. It covers all aspects of installation, configuration, and operation. An overview of the information found in the manual is provided below.

**Chapter 1, Introduction** introduces you to the 2-Port 4K DisplayPort USB-C KVM Dock Switch with Power Pass-Through. Its purpose, features, declaration, and panel components are presented and described.

**Chapter 2, Hardware Setup** describes the steps that are necessary to quickly and safely set up your installation.

**Chapter 3, The Firmware Upgrade Utility** explains how to download US3311's firmware files and upgrade the device using the utility.

**Appendix** provides a list of safety instructions and precautions, contact information for ATEN technical support, product specifications, and other technical information.

#### Note:

- Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit or any connected devices.
- This product may be updated with features and functions added, improved or removed since the release of this manual. For an up-to-date user manual, visit <u>http://www.aten.com/global/en/</u>

#### **Conventions**

This manual uses the following conventions:

Monospaced	Indicates text that you should key in.
[]	Indicates keys you should press. For example, [Enter] means to press the <b>Enter</b> key. If keys need to be chorded, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt].
1.	Numbered lists represent procedures with sequential steps.
•	Bullet lists provide information, but do not involve sequential steps.
>	Indicates selecting the option (on a menu or dialog box, for example), that comes next. For example, Start > Run means to open the <i>Start</i> menu, and then select <i>Run</i> .
A	Indicates critical information.



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## Chapter 1 Introduction

### Overview

Built to deliver easy control and seamless switching between dual USB-C hosts, the US3311 is a 2-in-1 solution combining a KVM switch and a multiport dock with 4 x USB Type-A ports, 1 x DisplayPort, 1 x USB-C PD input, and 1 x DC jack input. Quick switching from one laptop to the other is made easy through one press of the dedicated port switch button, enabling use of the same USB peripherals and a single DisplayPort monitor for two host devices. Work efficiency is boosted without the need to switch workstations or unplug peripherals.

Other highlights include video resolution support for up to 4K (3840 x 2160) @ 60 Hz, ensuring that every video detail is displayed in crisp UHD quality. The US3311 is a 4-port USB 3.2 Gen 1 Type-A hub with up to 5 Gbps data transfer rates while supporting high-speed downstream devices. Furthermore, the Power Delivery 3.0 technology enables charging of the host device with up to 100 W, allowing your laptop to obtain the maximum power via your USB-C power adapter. The US3311 helps save valuable desk space and expands the functionality and connectivity of your Mac laptops, creating an ultra-powerful USB-C workstation.

### Features

- 2-in-1 solution for 2 USB-C host devices combines a KVM switch and a multiport dock with 4 x USB 3.2 Gen 1 Type-A ports, 1 x DisplayPort, 1 x USB-C PD input, and 1 x DC jack input
- Superior video quality up to True 4K (3840 X 2160 @ 60 Hz)
- ATEN Video DynaSync<sup>™</sup> Technology eliminates boot-up display problems and optimizes resolutions when switching among video sources
- USB 3.2 Gen 1 compliant
- Up to 5 Gbps data transfer rates
- Supports DP 1.4 Alt Mode
- Supports PD 3.0 up to 100 W USB PD charging allows your laptop to obtain the maximum power via your USB-C power adapter
- Host device selection via the included port switch button
- Plug-and-Play no drivers needed

#### **Host Requirement**

USB-C enabled computer or smartphone / tablet with one of the following operating systems:

- Windows® 10 (32-bit / 64-bit) with 7<sup>th</sup>-Gen Intel Core Processor or above
  - Windows 10 version 2004
  - Windows 11 version 21H2
- MacOS X 10.12 or later
  - MacBook Pro 10.15.4
  - MacBook Air 11.3.1
  - Mac mini OS 11.3.1
  - Mac mini OS 12.3.1
  - MacBook Air 13" (A1932) 2018 macOS Monterey 12.2.1
  - Mac mini (A1993) 2018 macOS Monterey 12.4
- iPadOS 13.1 or later
  - iPad Pro 11 (A2377) iPadOS 15.1
- Android 8.0 or later
  - Huawei Mate 20.Harmony OS 2.0.0
  - Samsung Galaxy S21 Android 11
  - Samsung Galaxy Tab S7+ Android 12

**Note:** To transmit video through a USB-C port, make sure your computer supports DP Alt Mode over the USB-C port, and that it has been enabled.

#### Declaration

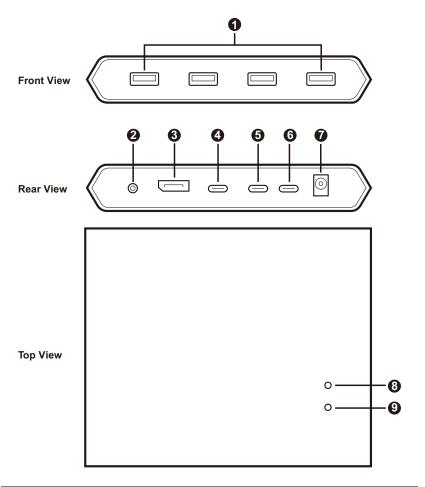
Samsung Dex is a registered application of Samsung Electronics. US3311 is not manufactured, sponsored, licensed or distributed by Samsung Electronics.

Huawei Desktop mode is a registered application of Huawei Technologies. US3311 is not manufactured, sponsored, licensed or distributed by Huawei Technologies.

Samsung	Huawei	НТС	LG
Samsung Galaxy S8	Huawei P20	HTC U11	LG V20
Samsung Galaxy S8+	Huawei P20 Pro	HTC U Ultra	
Samsung Galaxy S9			
Samsung Galaxy S9+			
Samsung Galaxy S10			
Samsung Galaxy S10+			
Samsung Galaxy S10e			
Samsung Galaxy Note 8			
Samsung Galaxy Note 9			

Below is a list of supporting mobile device:

### Hardware Overview



No.	Component	Description	
Front	Front View		
1	USB Type-A ports	Connects up to 4 USB peripherals such as a USB mouse, USB keyboard, camera, USB headset, or external hard drive. <b>Note:</b> These ports are USB 3.2 Gen 1 compliant.	
Rear	Rear View		
2	jack for port switch button	The port switch button plugs in here. Click the button to switch the KVM control between the two computers.	

No.	Component	Description
3	Display output port	Connects to a DisplayPort-enabled monitor for video display.
4	USB-C port (source 2)	Connects to a USB-C source device here. <b>Note:</b> This USB-C port supports device charing such as an iPad for up to 5V, 3A, 15W. Please check the power specification of the device before charging.
5	USB-C port (source 1)	Connects to a USB-C source device here.
6	USB-C port (power)	<ul> <li>Connects to a laptop power adapter for laptop PD charging on the source device connected to the USB-C port (source 1).</li> <li>Note:</li> <li>This USB-C port (power) supports USB-C PD laptop charging at 5V, 9V, 15V, and 20V output, and the USB-C power adapter is not supplied in the package.</li> <li>For device charging, a Limited Power Source (LPS) certified USB-C PD Power Adapter over 65 watts is recommended. The system power requirement for basic USB functions and video output should be at least 5V, 3A.</li> </ul>
7	power jack	Connects to the power adapter here.
Top View		
8	port 1 status LED	The LEDs correspond to the consoles. When the console is switched, the corresponding LED will light.
9	port 2 status LED	

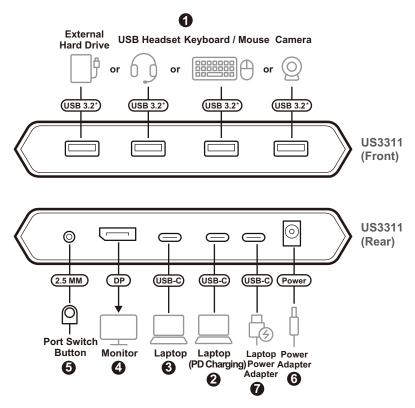
## Chapter 2 Hardware Setup



- 1. Please review the safety information regarding the placement of this device in *Safety Instructions*, page 15.
- 2. To prevent damage to your installation from power surges or static electricity. It is important that all connected devices are properly grounded.

## **Connecting the Unit**

Follow the steps below to connect the US3311 unit.



\*The indicated ports are USB 3.2 Gen 1 compliant.

- 1. Connect up to 4 USB peripherals such as a USB mouse, USB keyboard, printer, or external hard drive to the unit's USB Type-A ports.
- 2. Connect a USB-C source device to the unit's USB-C port (source 1).
- 3. Connect another USB-C source device to the unit's USB-C port (source 2).
- 4. Connect a DisplayPort-enabled display to the unit's DisplayPort output port.
- 5. Connect the supplied port switch button to the indicated jack.
- 6. Connect the power adapter to the unit's power jack.
- 7. (Optional) You can connect your source device to the USB-C port (power) for PD laptop charging.
  - **Note:** For device charging, a Limited Power Source (LPS) certified USB-C PD Power Adapter over 65 watts is recommended. The system power requirement for basic USB functions and video output should be at least 5V, 3A.

## Operation

- Press the port switch button to switch KVM control between the two USB-C source devices. The port LED for the selected port lights white.
- Press and hold the port switch button for 3 seconds if you encounter any monitor compatibility issues.
  - Please see the table below for USB standards and video resolutions when you switch between 2 lane and 4 lane modes for US3311. The port 1 and port 2 status LEDs light once to indicate the US3311 is switched to 2 lane mode, and light twice to indicate the US3311 is switched to 4 lane mode.

	DP 1.2		DP 1.4	
	USB	Resolution	USB	Resolution
2 Lane	3.0	4K30 Hz	3.0	4K60 Hz
4 Lane	2.0	4K60 Hz	2.0	8K60 Hz

8

## Chapter 3 The Firmware Upgrade Utility

### Overview

As new firmware versions become available, new firmware upgrade packages are posted on our website. Check the website regularly to find the latest information and packages.

#### Downloading the Firmware Upgrade Package

To download the firmware upgrade package:

- 1. On our Website, go to *Support Center Download* and choose the device model, or from the US3311 product page, click on the *Support and Downloads* tab, and go to *Software & Drivers*. A list of available firmware upgrade packages appears.
- 2. Choose the firmware upgrade package that you wish to install (usually the most recent) and download it to your computer.

#### Preparation

To prepare for the firmware upgrade, do the following:

- 1. Power off the US3311
- 2. Connect the USB-C port (source 1) to the computer (which the firmware upgrade package was downloaded to) using the supplied USB-C cable.
- 3. Press and hold the port switch button and make sure the port switch button is connected to the US3311.
- 4. Plug the power adapter cable into the power jack to power on the US3311. The port 1 status and port 2 status LEDs blink together once every 0.5 seconds to indicate Firmware Upgrade Mode is in effect.

## Starting the Upgrade

To upgrade the US3311, follow the steps below:

1. Run the downloaded Firmware Upgrade Package file – either by double clicking the file icon, or by opening a command line and entering the full path to it.

The Firmware Upgrade Utility Welcome screen appears:

Firmware Upgrade Utility	×
Welcome to the Firmware Upgrade Utility.	_
Put your device into Firmware Upgrade Mode. Use the Firmware Upgrade Cable to connect its Firmware Upgrade Port to your computer (or connect via Ethernet). Agree to the License Agreement; Then Click Nex	ct.
LICENSE AGREEMENT	^
LICENSE GRANT	
A TEN International Co., Ltd. ("Licensor") grants to you a non-exclusive, non-transferable license to access and use FIRM WARE UPGRADE UTILITY (the "Product") during the "Term" set forth below. You may install the Product on a hard disk or other storage device; install and use the Product on a file server for use on a network for the purposes of (i) permanent installation onto hard disks or other storage devices or (ii) use of the Product over such network; and make backup copies of the Product.	
RESTRICTIONS	
You agree not to modify, adapt, translate, reverse engineer, recompile, disassemble or otherwise attempt to discover the source code of the Product, or create derivative works based on the Product, or remove any proprietary notices or labels on the Product, including copyright, trademark or patent pending notices. You may not sublicense the Product or otherwise allow others to use the Product licensed to you.	•
⊙ I Agree ⊂ I Don't Agree	
Help About Cancel	

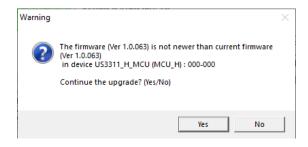
**Note:** The screens shown in this section are for reference only. The wording and layout of the actual screens put up by the Firmware Upgrade Utility may vary slightly from these examples.

- 2. Read the License Agreement (enable the *I Agree* radio button).
- 3. Click **Next** to continue. The Firmware Upgrade Utility main screen appears:

📽 Firmware Upgrade Utilit	y	$\times$
	s checked, the utility compares the device's firmware level with the upgrade newer, the utility lets you decide whether to continue or not. If it is not the upgrade directly.	
Device List:	Status Messages:	
US3311_H_MCU (MCU_H US3311_S_MCU (MCU_S) US3311_H_RTS5411 (HUF US3311_S_RTS5411 (HUE		
Device Description		
Check Firmware Version Progress		
Help View Lo	g < Back Next > Cance	1

The Utility inspects your installation. All the devices capable of being upgraded by the package are listed in the *Device List* panel.

4. Click **Next** to perform the upgrade.



If you enabled Check Firmware Version, the Utility compares the device's firmware level with that of the upgrade files. If it finds that the device's version is higher than the upgrade version, it brings up a dialog box informing you of the situation and gives you the option to Continue or Cancel.

If you didn't enable *Check Firmware Version*, the Utility installs the upgrade files without checking whether they are a higher level, or not.

As the Upgrade proceeds, status messages appear in the Status Messages panel, and the progress toward completion is shown on the *Progress* bar.

### **Upgrade Succeeded**

After the upgrade has completed, a screen appears to inform you that the procedure was successful:

Firmware Upgrade Utilit	у	×	
The Firmware upgrade was st Click Finish to close the utilit			
Device List:	Status Messages:		
US3311_H_MCU (MCU_H           US3311_S_MCU (MCU_S)           US3311_H_RTS5411 (HUF           US3311_S_RTS5411 (HUF           Opvice Description           CPU : RTS5411           Device F/W: Ver 1 0.063           U-Code: Ver 1 0.062           MID: On0-003	<pre>&lt; Erasing &lt; Programming &gt; Upgrading device US3311_H_MCU (MCU_H) : 000-000: OK</pre>	^	
MID. 000-005	> Firmware upgrade: OK	¥	
	< >		
Check Firmware Version Progress			
Help View Log < Back Finish Cancel			

Click Finish to close the Firmware Upgrade Utility.

After a successful completion, the US3311 exit Firmware Upgrade Mode, and resets itself.

## **Upgrade Failed**

If the *Upgrade Succeeded* screen doesn't appear, it means that the upgrade failed to complete successfully, in which case you should do the following:

- 1. Power off the US3311 by removing the power jack.
- 2. Invoke Firmware Upgrade Mode by holding down the *port switch button* (see *jack for port switch button*, page 5), and power on the US3311. The front LEDs flash together.
- 3. Do the firmware upgrade procedure again.

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# Appendix

## Safety Instructions

#### <u>General</u>

- This product is for indoor use only.
- Read all of these instructions. Save them for future reference.
- Follow all warnings and instructions marked on the device.
- Do not place the device on any unstable surface (cart, stand, table, etc.). If the device falls, serious damage will result.
- Do not use the device near water.
- Do not place the device near, or over, radiators or heat registers.
- The device cabinet is provided with slots and openings to allow for adequate ventilation. To ensure reliable operation, and to protect against overheating, these openings must never be blocked or covered.
- The device should never be placed on a soft surface (bed, sofa, rug, etc.) as this will block its ventilation openings. Likewise, the device should not be placed in a built in enclosure unless adequate ventilation has been provided.
- Never spill liquid of any kind on the device.
- Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- To prevent damage to your installation it is important that all devices are properly grounded.
- Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.
- Position system cables and power cables carefully; Be sure that nothing rests on any cables.
- Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.
- Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.

- If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
  - The power cord or plug has become damaged or frayed.
  - Liquid has been spilled into the device.
  - The device has been exposed to rain or water.
  - The device has been dropped, or the cabinet has been damaged.
  - The device exhibits a distinct change in performance, indicating a need for service.
  - The device does not operate normally when the operating instructions are followed.
- Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.
- Avoid circuit overloads. Before connecting equipment to a circuit, know the power supply's limit and never exceed it. Always review the electrical specifications of a circuit to ensure that you are not creating a dangerous condition or that one doesn't already exist. Circuit overloads can cause a fire and destroy equipment.

## **Technical Support**

#### **International**

- For online technical support including troubleshooting, documentation, and software updates: <u>http://support.aten.com</u>
- For telephone support, see *Telephone Support*, page iv:

#### North America

Email Support		support@aten-usa.com
Online Technical Support	Troubleshooting Documentation Software Updates	http://www.aten-usa.com/support
Telephone Support		1-888-999-ATEN ext 4988 1-949-428-1111

When you contact us, please have the following information ready beforehand:

- Product model number, serial number, and date of purchase
- Your computer configuration, including operating system, revision level, expansion cards, and software
- Any error messages displayed at the time the error occurred
- The sequence of operations that led up to the error
- Any other information you feel may be of help

## Specifications

Function		US3311
Computer Connections		2
Connectors	Computer	CPU 1: 1 x USB-C Female CPU 2: 1 x USB-C Female
	Device	4 x USB 3.2 Gen 1 Type-A Female
	Video Output	1 x DisplayPort Female
	Power	<ol> <li>1 x DC Jack for 12V, 3.3A         <ol> <li>1 x USB-C Female<sup>1</sup></li> </ol> </li> <li>Port 1: Supports USB-C PD laptop charging at 5V, 9V, 15V, and 20V output<sup>2</sup>         Port 2: Supports max. 5V, 3A output         </li> <li>Note:         <ol> <li>Supports maximum 100W USB-C PD power adapter input.</li> <li>For device charging, a Limited Power Source (LPS) certified single port USB-C PD Power Adapter over 65 Watt is recommended. The minimum system power requirement for basic USB functions and video output should be at least 5V, 3A.</li> </ol></li></ol>
Port Selection	Input	Port Switch Button
Video Resolution		Up to 3840 x 2106 @ 60 Hz

Function		US3311
System Requirements		<ul> <li>Windows 10 and above, USB-C enabled computer with DP Alt Mode</li> <li>Note: With Intel 7<sup>th</sup>-Generation Core</li> <li>Processor (Kaby-Lake) and above. More info about CPU generation, please find: <u>http://</u>www.intel.com/content/www/us/en/</li> <li>processors/processor-numbers.html</li> <li>MacOS X 10.12 and above, USB-C enabled computer</li> <li>Android 8.0 and later, USB-C enabled Smartphone with DP Alt mode</li> <li>Note: Only Samsung and Huawei support PC-like operation, others only support mirror mode. For a list of supporting mobile device, see <i>Declaration</i>, page 4.</li> <li>iPadOS 13.1 and above, iPad Pro (USB-C)</li> <li>Note: iPad Pro supports video output in mirror mode.</li> </ul>
Power	Maximum Input Power Rating	DC12V, 3.3A
Power Consump	otion	DC12V:1.68W:117BTU
LED	Selected	2 x White
Environmental	Operating Temp	0 – 40°C
	Storage Temp	-20 – 60°C
	Humidity	0 – 80% RH, Non-condensing
	Housing	Aluminum
Physical	Weight	0.35 kg (0.77 lb)
Properties	Dimensions (L x W x H)	14.30 x 11.90 x 2.38 cm (5.63 x 4.69 x 0.94 in)

## **ATEN Standard Warranty Policy**

#### Limited Hardware Warranty

ATEN warrants its hardware in the country of purchase against flaws in materials and workmanship for a Warranty Period of two [2] years (warranty period may vary in certain regions/countries) commencing on the date of original purchase. This warranty period includes the LCD panel of ATEN LCD KVM switches. For UPS products, the device warranty is two [2] years but battery is one [year]. Select products are warranted for an additional year (see A+Warranty for further details). Cables and accessories are not covered by the Standard Warranty.

#### What is covered by the Limited Hardware Warranty

ATEN will provide a repair service, without charge, during the Warranty Period. If a product is detective, ATEN will, at its discretion, have the option to (1) repair said product with new or repaired components, or (2) replace the entire product with an identical product or with a similar product which fulfills the same function as the defective product. Replaced products assume the warranty of the original product for the remaining period or a period of 90 days, whichever is longer. When the products or components are replaced, the replacing articles shall become customer property and the replaced articles shall become the property of ATEN.

To learn more about our warranty policies, please visit our website: <a href="http://www.aten.com/global/en/legal/policies/warranty-policy/">http://www.aten.com/global/en/legal/policies/warranty-policy/</a>

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