US3312

2-Port 4K DisplayPort USB-C Cable
KVM Switch with Remote Port
Selector
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

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 US3312 2-Port 4K DisplayPort USB-C Cable KVM Switch with Remote Port Selector

1 user instructions

Table of Contents

About this Manual

This user manual is provided to help you get the most from the US3312 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 Cable KVM Switch with Remote Port Selector. 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 US3312'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 http://www.aten.com/global/en/

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 **Enter** 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 *Start* menu, and then select *Run*.
⚠	Indicates critical information.

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Chapter 1
Introduction

Overview

ATEN US3312 2-Port 4K DisplayPort USB-C Cable KVM Switch with Remote Port Selector is developed for easy control and fast switch between two USB-C device sources from a single set of keyboard, mouse, and monitor. With cables coming already mounted on to it, the USB bus-powered US3312 supports two USB and one DisplayPort downstream ports, along with USB peripheral sharing capability. Containing a hook and an external remote port selector, the switch box can be placed anywhere to keep the workstation tidy while allowing users to instantly swap peripherals between the connected PCs and ensuring uninterrupted data transmission from a single user station. It supports resolutions up to True 4K (4096 x 2160 @ 60 Hz) to ensure that every detail of the video is displayed in the crisp and sharp UHD quality. The US3312 is a plug-and-play device that not only enhances the efficiency of multi-tasking, but also saves desktop space.

Features

- One KVM switch allows for easy control and fast switch between two USB-C devices from a single set of keyboard, mouse, and monitor
- Superior video quality — up to 4096 x 2160 @ 60 Hz (4:4:4)
- Instant computer selection via remote port selector
- LED indicators will light to display port focus
- Supports two USB and one DisplayPort downstream ports for USB peripheral sharing
- DisplayPort 1.2 compliant
- Bus-powered — no external power adapter or driver needed
- Supports USB hot-plugging
- Compact enclosure with hook design for space-saving and organized workstation

Note: For DisplayPort 1.4 compliant display devices, please make sure to configure the device setting to be compatible with DisplayPort 1.2 to avoid compatibility issues.
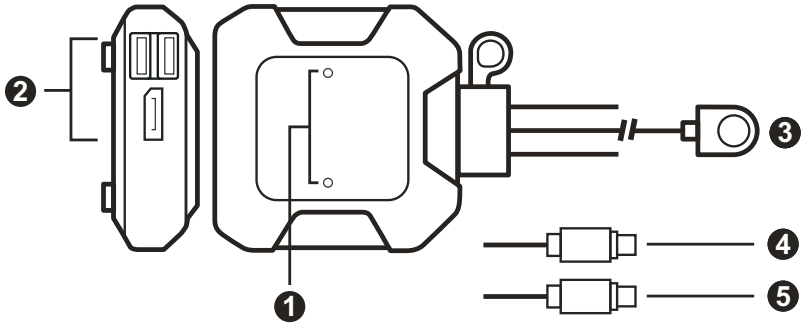
Host Requirement

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

- Windows® 10 (32-bit / 64-bit) with 7th-Gen Intel Core Processor or above
- MacOS X 10.12 or later
  - MacBook 2015 or above
  - MacBook Pro 2016 or above
- iPadOS 13.1 or later
- Android 8.0 or later

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.

Hardware Overview

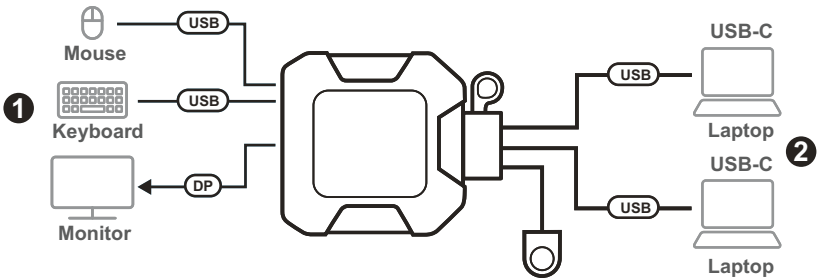| No.	Component	Description
1	port LEDs	The LEDs correspond to the consoles. When the console is switched, the corresponding LED will light.
2	console ports	The cables from your keyboard, mouse, and monitor plug in here. Each connector is marked with an appropriate icon to indicate itself.
3	remote port selector	Click the button to switch the KVM control between the two computers.
4	USB-C connector 1	Connects to an USB-C source.
5	USB-C connector 2	Connects to an USB-C source.

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Chapter 2
Hardware Setup

⚠️ 1. Please review the safety information regarding the placement of this device in *Safety Instructions*, page 13.

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 US3312 unit.

1. Connect the USB mouse, USB keyboard, and DisplayPort monitor into their respective ports on the US3312.

   Note: The USB Type-A ports can be used for USB peripheral sharing. Connect the USB peripherals and the USB keyboard or USB mouse into a USB hub, and then connect the USB hub into one of the USB Type-A ports.

2. Connect the USB-C connectors of the attached KVM cables into their respective ports on the USB-C devices that you are installing.

Operation

Press the remote port selector to switch KVM control between the two computers. The port LED for the selected port lights green.

Switching Between High Speed and Normal Speed Modes

To switch between high speed and normal speed modes for your DisplayPort display behavior, press and hold the remote port selector for 3 seconds.

- ◆ High Speed Mode: The port 1 and port 2 LEDs flash once to indicate the device is set to high speed mode.
- ◆ Normal Speed Mode: The port 1 and port 2 LEDs flash twice to indicate the device is set to normal speed mode. This is the default setting with US3312 using firmware version v1.1.101 or later.

Note: The configuration of Fast Switching Mode might not work with some monitors. If your video output does not display successfully or work properly, please use the default Normal Switching Mode instead.

Port Switching

If there is only one USB-C device connected to the US3312, the KVM control automatically switches to the connected port and stays fixed (e.g., port 1) to avoid switching to an unconnected port (e.g., port 2 / no KVM control).

Note: This function is only supported by US3312 using firmware v.1.1.103 or later.

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Chapter 3
The Firmware Upgrade Utility

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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 US3312 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

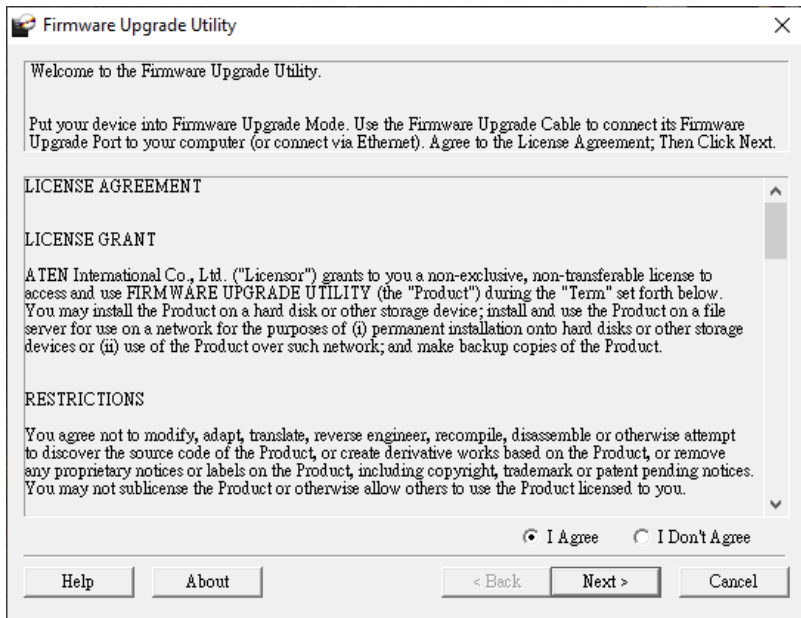To prepare for the firmware upgrade, do the following:

1. Power off the US3312

2. Press and hold the remote port selector button.

3. While you are still holding the button, connect the USB-C connector 1 to a USB port on the computer you have downloaded the Firmware Upgrade Package to.

4. The port LEDs blink together once every 0.5 seconds to indicate Firmware Upgrade Mode is in effect.

Starting the Upgrade

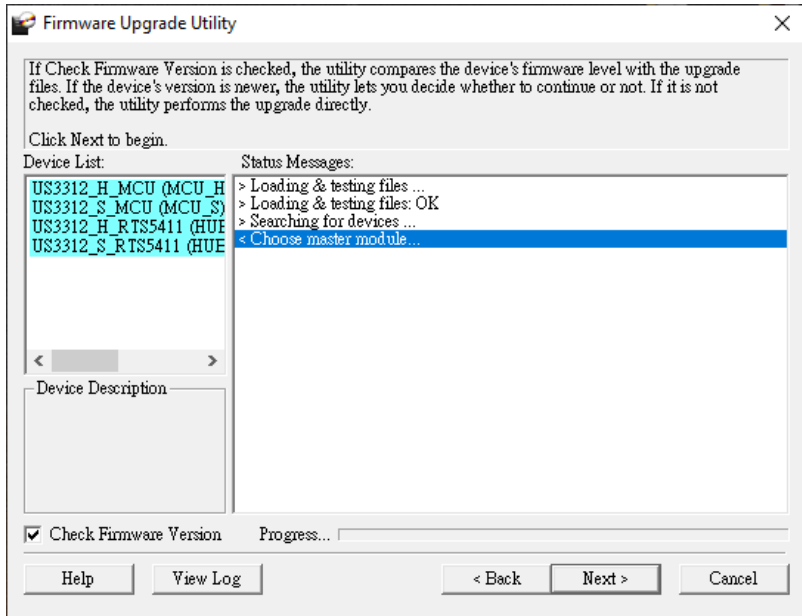To upgrade the US3312, follow the steps below:

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.
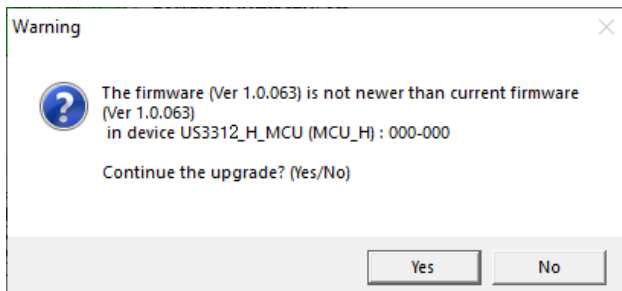   The *Firmware Upgrade Utility* Welcome screen appears:

> **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:

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

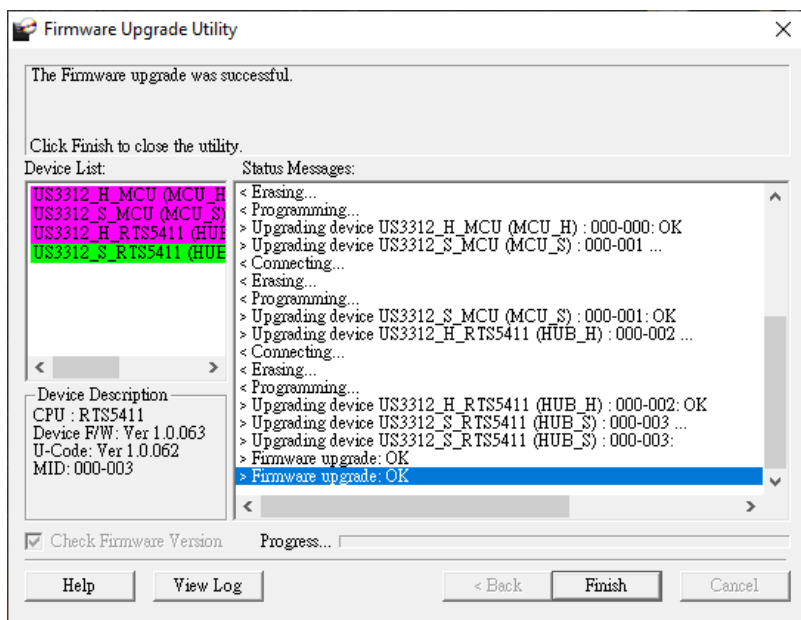4. Click **Next** to perform the upgrade.

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:

Click **Finish** to close the Firmware Upgrade Utility.

After a successful completion, the US3312 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 US3312 by removing the US3312 from the computer.

2. Invoke Firmware Upgrade Mode by holding down the *remote port selector button* (see *remote port selector*, page 3), and power on the US3312. The port LEDs flash together.

3. Do the firmware upgrade procedure again.

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Appendix

Safety Instructions

General

 * 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: http://support.aten.com
- 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		US3312
Computer Connections		2
Port Selection		Remote Port Selector
Connectors	Console Ports	1 x DisplayPort Female
		2 x USB Type-A Female
	KVM (Computer) Ports	CPU 1: 1 x USB-C Male
		CPU 2: 1 x USB-C Male
LED	KVM Port (On Line / Selected)	2 x White
Cable Length	KVM	2 x 1.2 m
	Remote Port Selector	1 x 1.8 m
Emulation	Keyboard / Mouse	N/A
Video		4096 x 2160 @ 60 Hz

Function	US3312
System Requirements	Windows USB-C enabled computer: ♦ Windows® 10 (32-bit / 64-bit) or above ♦ With Intel 7th-Generation Core Processor (Kaby -Lake with HD 6XX series integrated graphics) or above ♦ For video output to work through a USB-C port, it must support DP Alt Mode ♦ Thunderbolt™ 3 or above compatible Mac USB-C enabled computer: ♦ MacBook 2015 or above ♦ MacBook Pro 2016 or above ♦ Mac OS X 10.12 or later USB-C enabled Smartphone / Tablet: ♦ Android 8.0 or later / iPadOS 13.1 or later ♦ For video output to work through a USB-C port, it must support DP Alt Mode.
Power Consumption	DC5V:0.74W:8BTU/h **Note:** ♦ The measurement in Watts indicates the typical power consumption of the device with no external loading. ♦ The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Environment Operating Temp	0 – 50°C
Storage Temp	-20 – 60°C
Humidity	0 – 80% RH, Non-condensing

Function		US3312
Physical Properties	Housing	Plastic
	Weight	0.19 Kg (0.42 lb)
	Dimensions (L x W x H)	8.34 x 8.42 x 2.99 cm (3.28 x 3.31 x 1.18 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 [1] 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:
http://www.aten.com/global/en/legal/policies/warranty-policy/