

1-Local / Remote Shared Access Single Port 4K DisplayPort / HDMI KVM over IP Switch

RCMDP101U / RCMHD101U

The RCMDP101U / RCMHD101U Single Port DisplayPort / HDMI KVM over IP Switch is a KVM device exclusively designed for production line applications, which can grant the video, audio, mouse & keyboard, and virtual media access of a workstation at a production line to a local and remote consoles for convenient management. It also supports microphone and speakers for both local and remote consoles.

Integrated with ATEN's exclusive RCM API and an FPGA graphics processor supporting up to 4K DCI resolution (4096 x 2160 @ 30 Hz), the KVM over IP Switch delivers optimal OCR functionality and customizable system integration and automation. Additionally, by using the RCMMS (RCM Management Software), an intuitive, centralized management platform featuring Panel Array, users can manage, monitor, and control up to hundreds of RCM devices simultaneously.

For enhancing its production line application capabilities, RCMDP101U / RCMHD101U features USB / RS-232 touch panel support, OSD title-bar notification, and local console priority. Furthermore, with the ATEN Access Control Box (2XRT-0015G) installed, remote access to the RCMDP101U / RCMHD101U can be enabled or disabled on site as required.

For user-friendly operation, a mini USB port on the front panel is designed as a Laptop USB Console (LUC) port. By simply connecting a laptop to the LUC port, users can access any computer connected to the switch for easy on-site management. That means no additional monitor, keyboard and mouse is required locally for routine maintenance. Additionally, the RCMDP101U / RCMHD101U's Virtual Media function allows a user to perform diagnostic testing, file transfers, or apply OS / applications updates and patches from a remote console.

To ensure seamless connectivity, the RCMDP101U / RCMHD101U is equipped with dual LAN and dual power functionality for keeping operation at the production line smooth and efficient.

All in all, the RCMDP101U / RCMHD101U provides a complete system management across different facilities reduces the number of operators required on site to minimize space requirement while maximizing personnel efficiency. With its over-IP access eliminating the need to physically move legacy KVM solution to each malfunctioning unit, providing users with the ability to capture the device display screen data for data collection and direct OCR analysis, and using APIs for software integration applications, it is an outstanding solution for high-tech production lines requiring durable and reliable over-IP server management.

RCMDP101U Front View



RCMDP101U Rear View



RCMHD101U Front View



RCMHD101U Rear View



Features

Exclusive RCM functionalities

- Supports ATEN Access Control Box for on-site enabling / disabling of remote control privilege
- Supports RCMMS for customizable Panel Array for operators to monitor all machines simultaneously
- Supports exclusively integrated RCM APIs with various functions, such as OCR, for system integrators
- OSD title bar notification — instantly notifies users upon urgent events
- Local console priority — gives the local console the priority over remote consoles to access the connected server

Hardware

- Compact and slim design for space usage optimization
- Provides an FPGA graphics processor for better image quality
- RS-232 DTE / DCE standards compliant for serial control
- Provides over-IP capability to KVM switches that do not have built-in over-IP functionality¹
- Local console provides USB keyboard and mouse support²
- A mini USB port on the front panel serves as a Laptop USB Console (LUC) port
- Two 10 / 100 / 1000 Mbps NICs for redundant LAN or dual IP operation
- Dual Power Supply for power backup
- Supports multiplatform server environments: Windows, Mac, Sun, Linux and VT100 based serial devices
- Virtual Media support
- High video resolution — up to 4096 x 2160 @ 30 Hz for both local and remote consoles
- Audio support — microphone and speakers are supported on both local and remote consoles³

Note:

1. When connecting to KVM switches, certain features of the RCMDP101U / RCMHD101U may not be supported (e.g. some switches do not support virtual media).
2. Using keyboards / mice with OS-dependent functions not designed for Windows may have compatibility issues. Windows may have compatibility issues.
3. Audio is not supported by RCMDP101U's DisplayPort and can only be transmitted through its 3.5 mm audio ports.

Management

- Up to 64 user accounts — up to 32 users can simultaneously share control*
- Console access right management
- End session feature — administrators can terminate running sessions
- Event logging and Windows-based Log Server support
- Event Logging — the RCMDP101U / RCMHD101U can record all events and write them to a searchable database
- Supports instant notification of critical system events via email, SNMP trap and Syslog
- Firmware upgradable via remote access
- Access via a built-in serial viewer, or via third-party software (such as PuTTY) for Telnet and SSH sessions
- Out-of-band support — accessible through its serial port using a dial-up connection
- Port Share Mode allows multiple users to gain access to a server simultaneously
- Local / Remote Share Mode conveniently grants shared or exclusive console privilege
- Integration with ATEN CCVSR Video Session Recording Software
- Supports ATEN KVM over IP Console Station (KA8270 / KA8280 / KA8278 / KA8288)
- DDNS — allows mapping of a dynamic IP address assigned by a DHCP server to a host name
- Supports export / import of user account and configuration settings
- Browser Access Permission — extra security feature to allow / disallow browser http / https access
- Supports IPv6

Note: As more users connect to the device, the bandwidth allocated to each user decreases.

Easy-to-Use Interface

- Browser-based and AP GUIs offer a unified multilanguage interface to minimize user training time and increase productivity
- Multiplatform client support (Windows, Mac, Linux, Sun)
- Multibrowser support (IE, Firefox, Safari, Opera, Netscape)
- Browser-based UI in pure Web technology allows administrators to perform administrative tasks without pre-installed Java software package requirements
- Full-screen or sizable and scalable Virtual Remote Desktop
- Magic Panel with configurable function for quick launch

Advanced Security

- External authentication support: RADIUS, LDAP, LDAPS and MS Active Directory
- Supports TLS 1.2 data encryption and RSA 2048-bit certificates to secure users logging in from browsers
- Flexible encryption design allows users to choose any combination of 56-bit DES, 168-bit 3DES, 256-bit AES, 128-bit RC4 or Random for independent keyboard / mouse, video, and virtual media data encryption
- Supports IP / MAC Filter
- Supports password protection
- Private CA

Virtual Media

- Virtual media enables file applications, OS patching, software installation and diagnostic testing
- Works with USB-enabled servers at OS and BIOS level
- Supports USB 1.1 and USB 2.0 DVD / CD drives, USB mass storage devices, PC hard drives, folders and ISO images

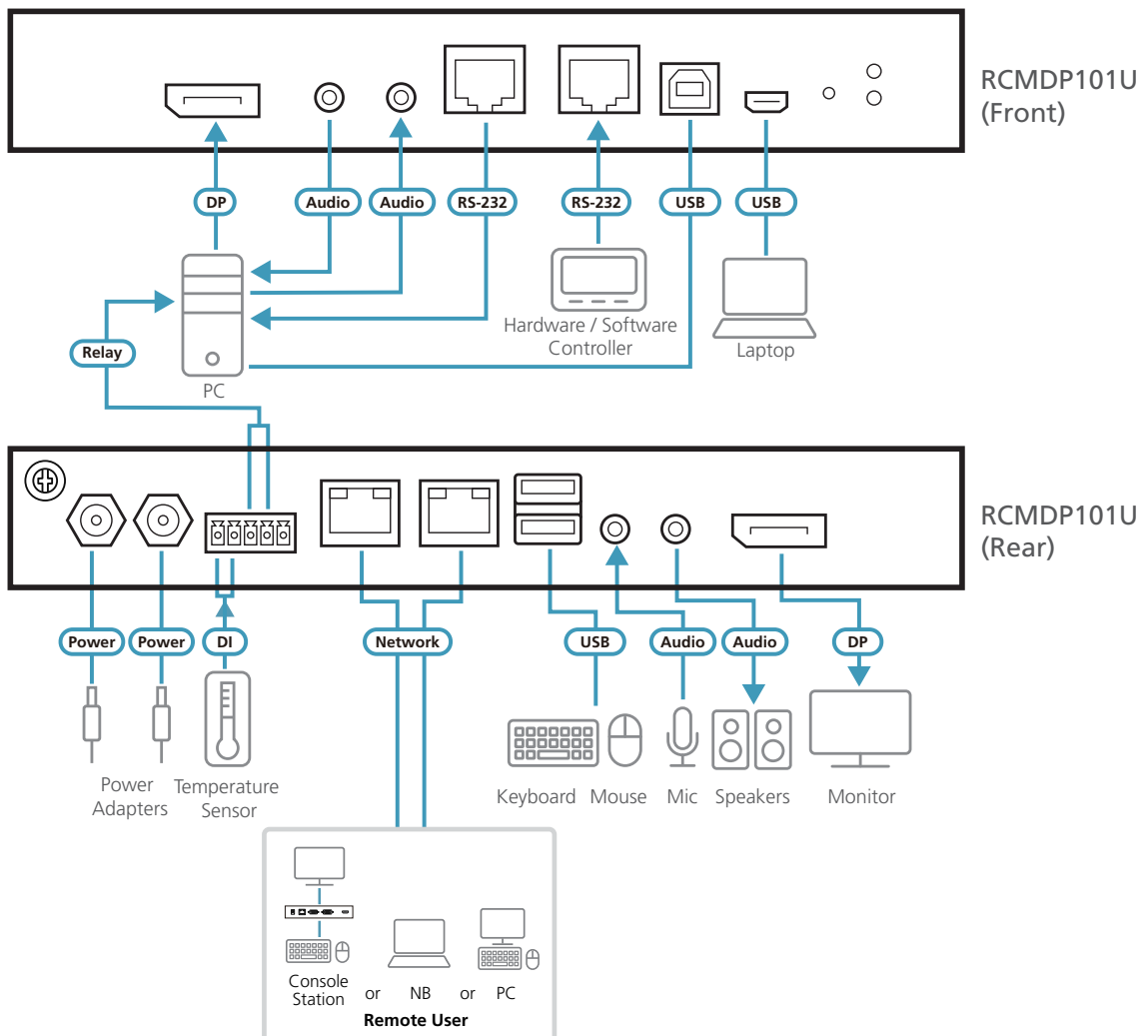
Virtual Remote Desktop

- Video quality can be adjusted to optimize data transfer speed; monochrome color depth, threshold and noise settings can be adjusted for compression of the data bandwidth in low bandwidth situations
- Full-screen video display or scalable video display
- Message Board for communication among remote users
- On-screen keyboard with multilanguage support
- Mouse DynaSync™ — automatically synchronizes the local and remote mouse movements
- Supports Exit Macros
- BIOS-level access

Highlights

Exclusive RCM Features	<p>The RCMDP101U / RCMHD101U is compatible with the 2XRT-0015G KVM over IP Access Control Box, allowing users to enable or disable remote control privilege, and supports Panel Array for monitoring all machines with multiple RCM products. The RCMDP101U / RCMHD101U also offers exclusively integrated RCM APIs with various functions, such as OCR, for easy management.</p>
Enhanced System Availability	<p>Dual Gigabit LAN (10 / 100 / 1000 Mbps) ports / Dual Power The dual LAN and dual power supply provides backup / redundancy for ensured reliability. Should one of the IPs or one of the power supplies becomes unavailable, a backup takes over in order to keep the system functioning normally.</p> <p>Modem dial-in/dial-back/dial-out support for OOB This function provides backup for networking connectivity and ensures high system reliability and availability.</p>
Audio Support	<p>Microphone and speakers are supported by both local and remote consoles.</p>
Advanced Security External Authentication Support	<p>In addition to its own security protection, the RCMDP101U / RCMHD101U allows users to set up login authentication and authorization management from external sources, such as RADIUS, LDAP, LDAPS and MS Active Directory.</p>

<p>Virtual Media</p>	<p>Virtual Media support lets users map DVD / CD-ROMs and other storage media to a remote server. This function allows users to conduct file transfers, application and OS patches, and diagnostic tests remotely.</p>
<p>Smart Card /CAC Reader Support</p>	<p>This function allows a smart card reader that is plugged into a remote client computer's USB port to be redirected, and appear as if it were plugged into the local server. One purpose of smart cards (Common Access Cards, for example) is to allow authentication to the local server from the remote client.</p>
<p>Virtual Remote Desktop</p>	<p>The remote desktop can appear in full screen or as a window with a flexible, scalable video display. Advanced features such as the Message Board, Mouse DynaSync™, Virtual Media, and Keyboard Pass Through, create a Virtual Remote Desktop that allows users to operate servers from remote locations as if they were actually at the local site.</p>



Specifications

	RCMDP101U	RCMHD101U
Connectors		
Console Ports	2 x USB Type-A Female (White) 1 x DisplayPort Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)	2 x USB Type-A Female (White) 1 x HDMI Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)
KVM Ports	1 x USB Type-B Female (White) 1 x DisplayPort Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)	1 x USB Type-B Female (White) 1 x HDMI Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)
LAN Ports	2 x RJ-45 Female	
Virtual Media	1 x USB Mini-B Female	
Power	2 x DC Jack	
Serial	2 x RJ-45 Female	
Control	1 x 6-pin Mini-DIN Female (Purple)	
Switches		
Reset	1 x Semi-recessed pushbutton (Black)	
Emulation		
Keyboard / Mouse	USB	
LEDs		
Power	2 (Green)	
Video	Local console – 4096 x 2160 @ 30 Hz Remote console – 4096 x 2160	
Power Consumption	DC 5 V:9.76 W	DC 5 V:10.07 W
Environmental		
Operating Temperature	0 – 50 °C	
Storage Temperature	-20 – 60 °C	
Humidity	0 – 80% RH, Non-condensing	
Physical Properties		
Housing	Metal	
Weight	0.85 kg	0.84 kg
Dimensions (L x W x H)	20.00 x 14.93 x 2.85 cm	20.00 x 15.05 x 2.84 cm

ATEN International Co., Ltd.

3F., No.125, Sec. 2, Datung Rd., Sijhih District., New Taipei City 221, Taiwan
Phone: 886-2-8692-6789 Fax: 886-2-8692-6767
www.aten.com E-mail: marketing@aten.com

Product information is subject to change without prior notice.

Released: 04/2025 V5.0

© Copyright 2025 ATEN® International Co. Ltd.
ATEN and the ATEN logo are registered trademarks of ATEN International Co., Ltd.
All rights reserved. All other trademarks are the property of their respective owners.
The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

