# DVI-I Single Display KVM over IP Transmitter with Remote Access / DVI-I Dual Display KVM over IP Transmitter with Remote Access
## RCMDVI00AT / RCMDVI40AT

The RCMDVI00AT and RCMDVI40AT are high performance IP-based transmitters that can provide remote access through Windows / Java Client via their remote ports, while providing remote console access from a separate location when used with receivers. The setup allows extended access for remote computer systems via USB consoles (USB keyboard, USB mouse, DVI monitor) over intranet and Internet, enabling users to place the the managed servers / computers in secure and temperature-controlled environments, which may be isolated from users' workstation.

The RCMDVI00AT / RCMDVI40AT is integrated with exclusive RCM APIs for providing various extensive functions, including local / remote access control, automated operation sequences (SendKey / SendMouse), screen monitoring, remote troubleshooting, image sampling comparison, optical character recognition (OCR), and more. The RCMDVI00AT / RCMDVI40AT is equipped with an FPGA graphics processor that offers great image and video quality to enhance OCR accuracy. Moreover, the RCMDVI00AT / RCMDVI40AT further enhances its production line application capabilities by supporting OSD Title Bar Notification and Access Control Box (2XRT-0015G), for enabling / disabling remote control privilege locally.

The RCMDVI00AT / RCMDVI40AT also supports ATEN's Control Center Video Session Recorder (CCVSR) software for recording of all operations made on the server connected via its remote port. Every operation and change — boot-ups at BIOS level to system level, logging in and logging out, running software applications to configure the operating system — is recorded and saved to a secure video file for security reference and troubleshooting purposes, and etc.

The RCMDVI00AT DVI-I Single Display KVM over IP Transmitter supports one DVI display while the RCMDVI40AT DVI-I Dual Display KVM over IP Transmitter supports two — both models provide lossless and low latency video transmissions up to 1920 x 1200 @ 60 Hz.

The transmitter supports connections via an RJ-45 port or a SFP slot. It can be connected to a receiver either directly, or via a high-speed network over a copper-based or fiber-based LAN. When connecting to a fiber optic network using 1-Gbps SFP fiber module* expansions, users can extend transmission distances to up to 10 km. The RCMDVI00AT / RCMDVI40AT also features dual power supplies for redundancy to ensure uninterrupted operation. In addition, with RS-232 support and Auto MDIX, the RCMDVI00AT / RCMDVI40AT provides a convenient way for instilling digital extension for production line applications through a network.

As an IP-based matrix extender, the RCMDVI00AT / RCMDVI40AT can be used as a point-to-point / point-to-multipoint / multipoint-to-point / multipoint-to-multipoint extender. When combined with the KVM over IP Matrix Manager (CCKM), it can be integrated into a KVM over IP Matrix System (multipoint-to-multipoint) for providing more flexible applications in different working environments.

Implementing the CCKM with RCMDVI00AT / RCMDVI40AT, IT administrators can benefit from advanced features such as auto detection of all RCMDVI00AT / RCMDVI40AT devices on the same subnet for the sake of fast installation or configuration, username/password authentication and authorization, and the ability to define different types of connections that can be switched and shared. Security features of the RCMDVI00AT / RCMDVI40AT include AES 128-bit encryption for secured data transmissions, as well as RADIUS, LDAP, Active Directory, TACACS+ for 3rd-party authentication services. All in all, the RCMDVI00AT / RCMDVI40AT is the most cost-effective and convenient way to instill full digital extension for production line applications through a network.

*The SFP module (2A-136G / 2A-137G) is sold separately. Contact your ATEN dealer for product information.

RCMDVI00AT

RCMDVI00AT Front View

RCMDVI00AT Rear View

RCMDVI40AT

RCMDVI40AT Front View

RCMDVI40AT Rear View

# Features

## Advanced Features*

- Supports exclusive integrated RCM API with various functions for system integrators by remote port
- Supports recording of remotely-accessed computer operations using CCVSR
- Boundless Switching — simply move the mouse cursor across screen boundaries to switch between different receivers (Rx)
- "Push" and "Pull" — shares content instantly to / from a single Rx or video wall by just one click
- Video Walls — create multiple video walls with up to 8 x 8 (64 displays max.) in each layout
- Advanced Scheduling — improves efficiency and saves costs by allowing connections to be set based on time and date
- Virtual Transmitter — independently streams video, audio, USB, and serial sources from different Tx
- Internal and external authentication support — supports LDAP, Active Directory, RADIUS and TACACS+ external authentications
- Configurable user and group permissions for access and control of RCM / KVM over IP extenders
- Rx access control — users at the Tx local console can enable / disable Rx access by simply pressing a control button**

*These advanced functions are supported when the RCM / the KVM over IP transmitters are paired with the KVM over IP receivers and managed by CCKM.

**The KVM over IP Access Control Box (2XRT-0015G) is sold separately. Contact your ATEN dealer for product information.

## Hardware

- Supports power / network failover — dual DC jacks for power redundancy and 1 RJ-45 and 1 SFP fiber ports for network failover to ensure constant availability for mission-critical applications
- Supports 1Gbps SFP fiber module expansions up to 10 km*
- Advance processor provides lossless and low latency video transmissions up to 1920 x 1200 @ 60 Hz
- Supports digital (DVI) or analog (VGA) video output**
- Audio Enabled — supports stereo speakers and microphone
- High speed Virtual Media Support***
- Auto-MDIX — automatically detects cable type
- Built-in 8kV / 15kV ESD protection and 2kV surge protection
- Fanless design for silent operations that are energy efficient
- Mounting options:
    - 2X-021G Dual Rack Mount Kit
    - 2X-031G Single Rack Mount Kit
- Includes an industrial-grade power adapter — supports operating temperature of 0 – 50 °C to ensure durability and adaptability under harsh environmental conditions

*The SFP module (2A-136G / 2A-137G) is sold separately. Contact your ATEN dealer for product information.

**To convert a DVI to VGA signal, a DVI-I to VGA converter is required.

*** Some of the RCMDVI00AT / RCMDVI40AT's features may not be supported, depending on the functionality of the cascaded KVM switch. (For example, some switches do not support virtual media.)

## Management

- Integration with ATEN CCVSR Video Session Recording Software
- Local console — flexible local or over IP console access
- EDID Expert™ — selects optimum EDID settings for smooth power-up and highest quality display
- Four selectable access modes for multiple simultaneous access (Exclusive / Occupy / Share / View only mode) —administrators can select access modes of permissions on Tx devices to boost collaboration or to avoid interference among users
- On-screen Preview — allows users to view the video of up to 36 displays on one screen
- Fast Switching — switches between different remote video resolutions on a local display within 0.3 seconds
- Command Line Interface — administrators can control all RCM / KVM over IP extenders via RS-232 or TCP/IP using a CLI or 3rd party application
- Supports Hotkey Commands
- Flashing LED and beeping feature helps locate and identify devices
- RCM / KVM over IP extenders devices can "Push" and "Pull" to share content

## Security

- Dedicated LAN port for RCM / KE direct connections — can be isolated from the corporate network
- Secure data transmission — AES 128-bit encryption to secure all data before transmitted over a network and decrypts the data on the receiver
- Supports industry-standard Transport Layer Security (TLS) protocol
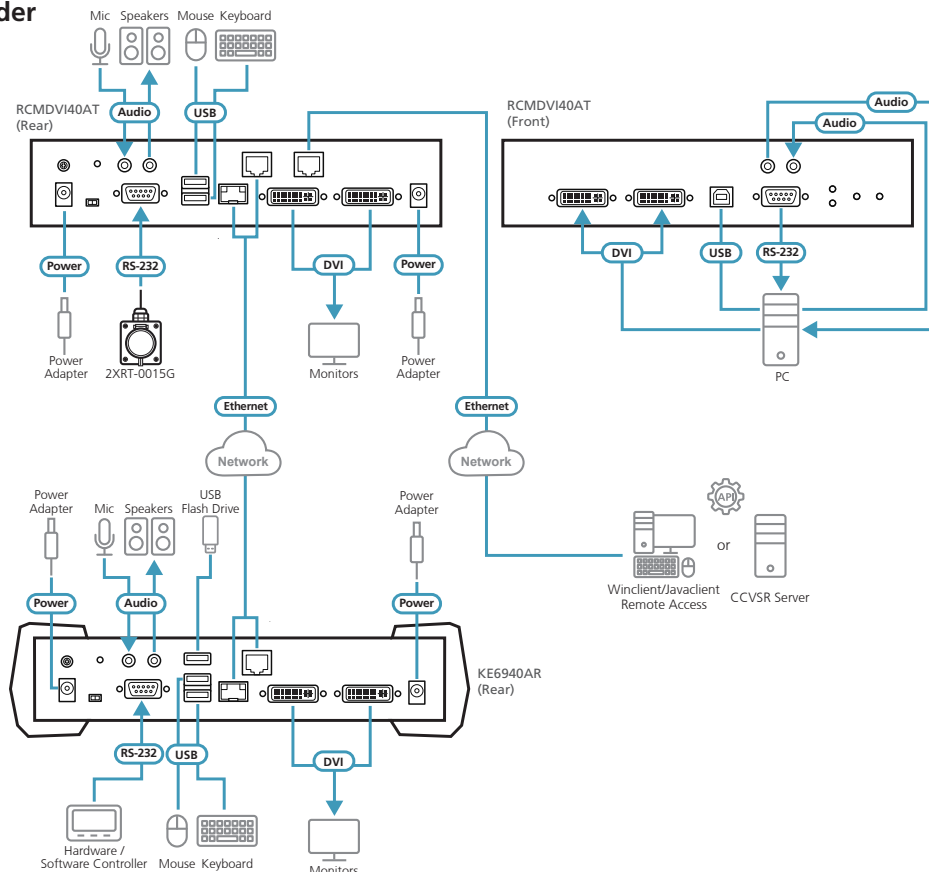
## Virtual Media

- Virtual media enables file transfers, OS patching, software installations and diagnostic testing
- Supports USB 2.0 DVD / CD drives, USB mass storage devices, PC hard drives and ISO images
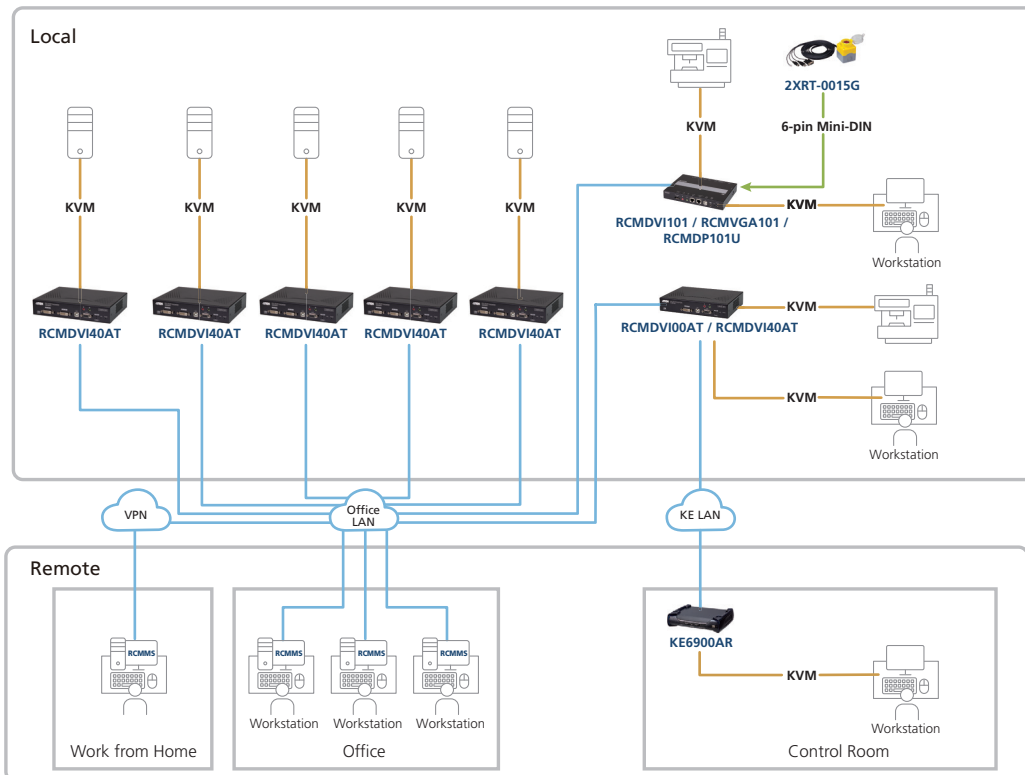- Supports Smart Card / CAC Reader

# Highlights

| | |
|---|---|
| **Exclusive RCM Features** | The RCMDVI00AT / RCMDVI40AT 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 RCMDVI00AT / RCMDVI40AT also offers advanced and exclusive RCM and OCR API with various functions integrated for easy management. |
| **Over IP** | Extend a computer's KVM console across any distance over a LAN by connecting the Tx and Rx units to your network. Extend a computer's KVM console up to 100 meters by directly connecting the Tx and Rx units with a single Cat 5e / 6 cable. Standard IP protocols ensure maximum compatibility with your existing IT infrastructure and staff skill set. |
| **Redundancy** | The RCMDVI00AT / RCMDVI40AT supports connection via Gigabit Ethernet port (RJ-45), Internet port and SFP port  for failover or dual IP address access. Moreover, the RCMDVI00AT / RCMDVI40AT supports dual power for redundant power supply. |
| **SFP Module** | The RCMDVI00AT / RCMDVI40AT supports 1Gbps SFP fiber module expansions, enabling connections with network switch allowing either an optical Fiber Channel SFP module or Active Copper SFP module. The single-mode SFP module provides 1GbE connectivity up to 10 kilometers while the multi-mode SFP module provides 1GbE connectivity up to 550 meters. **Note:** The SFP module (2A-136G / 2A-137G) is sold separately. Contact your ATEN dealer for product information. |
| **Unprecedented Video Quality** | ATEN's advanced graphics processor delivers video that ensures you to experience the same vivid and sharp image quality on the remote monitor no matter how far away the console is located. |
| **Advanced Management System** | The RCMMS / CCKM allows you to easily administer all the KVM over IP extenders over a network, using an intuitive user-friendly, web-based GUI. |
| **Boundless Switching\*** | Simply move the mouse cursor across screen boundaries to switch between different receivers. The function expedites the process of switching between receivers for a smooth and hassle-free user experience. |
| **Flexibility** | The RCM / the KVM over IP extender allows you to access, share, and switch full control of Tx connected computers — from any Rx (KVM console) on the network. Flexibly allows point-to-point / point-to-multipoint / multipoint-to-point / multipoint-to-multipoint  computer to KVM console connections. |
| **Enhanced Security Features** | Compliant with universal enterprise-grade security standards (AES encryption for secured signal transmission and Transport Layer Security (TLS) protocol), the RCM / the KVM over IP extender provides different levels of username / password authentication and authorization. |

*These advanced functions are supported when the RCM / the KVM over IP transmitters are paired with the KVM over IP receivers and managed by CCKM.

ATEN
Simply Better Connections

## RCMDVI40AT Extender Mode Connection Diagram

Mic  Speakers  Mouse  Keyboard

RCMDVI40AT (Rear)

Audio    USB

RCMDVI40AT (Front)

Audio
Audio

Power    RS-232    DVI    Power

DVI    USB    RS-232

Power Adapter    2XRT-0015G    Monitors    Power Adapter

PC

Ethernet    Ethernet

Network    Network

Power Adapter    Mic  Speakers    USB Flash Drive    Power Adapter

Winclient/Javaclient Remote Access    or    CCVSR Server

Power    Audio    Power

KE6940AR (Rear)

RS-232    USB    DVI

Hardware / Software Controller    Mouse  Keyboard    Monitors

## RCMDVI40BT Matrix Mode Connection Diagram

Local

KVM    KVM    KVM    KVM    KVM

2XRT-0015G

6-pin Mini-DIN

KVM

RCMDVI101 / RCMVGA101 / RCMDP101U

KVM

Workstation

RCMDVI40AT    RCMDVI40AT    RCMDVI40AT    RCMDVI40AT    RCMDVI40AT

RCMDVI00AT / RCMDVI40AT

KVM

Workstation

KVM

Workstation

VPN    Office LAN    KE LAN

Remote

RCMMS

RCMMS    RCMMS    RCMMS

KE6900AR

KVM

Work from Home    Workstation  Workstation  Workstation    Workstation

Office    Control Room

● Control    ● KVM    ● Network

# Specifications

| | RCMDVI00AT | RCMDVI40AT |
|---|---|---|
| **Connectors** | | |
| USB Port | N/A | |
| Console Ports | 2 x USB Type-A Female (White)<br>1 x DVI-I Female (White)<br>1 x Mini Stereo Jack (Green)<br>1 x Mini Stereo Jack (Pink)<br>1 x DB-9 Male (Black) | 2 x USB Type-A Female (White)<br>2 x DVI-I Female (White)<br>1 x Mini Stereo Jack (Green)<br>1 x Mini Stereo Jack (Pink)<br>1 x DB-9 Male (Black) |
| KVM Ports | 1 x USB Type-B Female (White)<br>1 x DVI-I Female (White)<br>1 x Mini Stereo Jack (Green)<br>1 x Mini Stereo Jack (Pink)<br>1 x DB-9 Female (Black) | 1 x USB Type-B Female (White)<br>2 x DVI-I Female (White)<br>1 x Mini Stereo Jack (Green)<br>1 x Mini Stereo Jack (Pink)<br>1 x DB-9 Female (Black) |
| Power | 2 x DC Jack (Black) | |
| LAN Ports | 1 x RJ-45 (Black)<br>1 x SFP Slot | |
| Internet Ports | 1 x RJ-45 (Black) | |
| **Switches** | | |
| OSD | N/A | |
| Video | N/A | |
| Graphics | N/A | |
| Reset | 1 x Semi-recessed Pushbutton | |
| Mode Selection | 1 x Slide Switch (Auto, RS-232 Config / Access Control, Local) | |
| **LEDs** | | |
| Link | 1  (10: Orange / 100: Orange & Green / 1000: Green) | |
| Power | 1 (Blue) | |
| Local | 1 (Green) | |
| Remote | 1 (Green) | |
| **Emulation** | | |
| Keyboard / Mouse | USB | |
| **Power Consumption** | DC 12 V : 12 W : 60 BTU | |
| **Video Resolution** | Up to 1920 x 1200 @ 60 Hz | |
| **Environmental** | | |
| Operating Temperature | 0 – 50 °C | |
| Storage Temperature | -20 – 60 °C | |
| Humidity | 0 – 95% RH, Non-condensing | |
| **Physical Properties** | | |
| Housing | Metal | |
| Weight | 1.16 kg | 1.18 kg |
| Dimensions (L x W x H) | 21.50 x 16.33 x 4.18 cm | |

Product information is subject to change without prior notice.