



# Remote Management Solutions

For Unmanned Server Rooms, Distributed Utilities,  
and Limited-Access Facilities



# Contents



ATEN Remote Management Solutions	1
ATEN Advantages	2
ATEN Solutions	2

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Case Study 01	
Remote Management for Unmanned Server Room	3

Case Study 02	
Remote Access for Surveillance / Incident Detection	5

Case Study 03	
Complete Remote Management Solution for Distributed Utilities	7

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ATEN Featured Products	9	KVM over IP Switch / Extender
	10	Serial Console Server
	10	eco PDU
	11	Management Software

# ATEN Remote Management Solutions

ATEN KVM over IP solutions allow operators to monitor and access multiple servers remotely at any time and from anywhere. Especially suitable for the management of data centers or branch office servers, ATEN solutions are also equally suited to the task of remotely managing server rooms or IT installations that may be unmanned, staffed only part-time, widely distributed, or have limited access for a variety of reasons.

Some common pain points are as follows:

- **Cost** – full-time onsite IT personnel for server rooms may be cost-prohibitive
- **Distance** – with a wide distribution of server sites over large distances, it may be impractical to staff them all
- **Large Numbers of Different Devices** – in addition to servers, there may be large number of other unmanned remote devices such as network switches and UPS
- **Security** – it can pose a security risk to have access software/drivers installed on remote servers/installations
- **Limited Access** – access may be limited to reduce the possibility of human error or environmental contamination

ATEN provides a full range of remote management and support solutions for use in any unmanned, widely distributed or limited-access facility that needs to be monitored. These are specifically focused on IT environments that require a complete remote support solution, including BIOS-level KVM over IP access and power management, to compensate for personnel limitations while maintaining the highest levels of security, such as unmanned server rooms and edge data centers containing mission-critical equipment, utilities centers that are widely distributed in distant locations, or fab clean rooms where environmental contamination is a huge risk.

# ATEN Advantages

ATEN KVM over IP Remote Management Solutions provide the following advantages:



Complete Centralized Access  
to Critical Systems



Non-Intrusive and Software-free  
Remote Access for Higher Levels  
of Data Security



Real-time Remote Management  
with No Distance Limitations



Flexible, Scalable,  
Customizable Solutions



Convenient IT Deployment,  
Updating and Maintenance



Superior Video, up to 4K

## ATEN Solutions

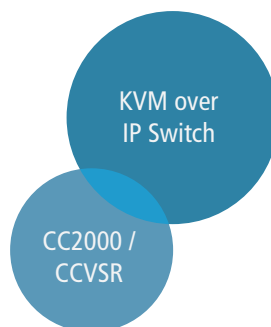
ATEN Remote Management solutions can be divided into three main types, as follows:

### ATEN's Three Kinds of Solutions

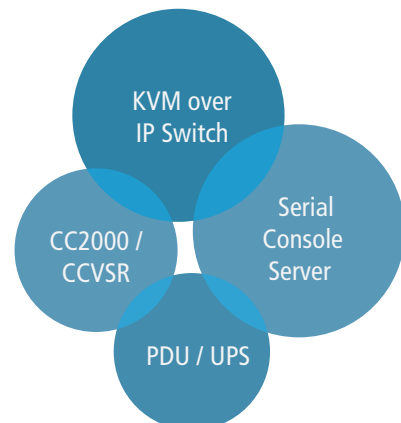
**1** Remote Management for  
Unmanned Server Rooms



**2** Remote Access for Non-intrusive  
Surveillance / Incident Detection



**3** Complete Remote Server +  
Switch Management +  
Remote Power Management







# 01

## Remote Management for Unmanned Server Room

### Oil Drilling Platform

An oil and gas company needed a management solution for a server room located out at sea on a ship-based oil drilling platform. Due to the extremely high cost of onboard personnel, and the fact that there are strict limits to the number of people on the ship due to safety regulations, it is impractical to have onsite IT support. Therefore, they required a remote IT management solution so the drilling platform's server room could be managed from two locations on shore.

## The ATEN Solution

- ➔ Provided remote access and control of off-shore server room via satellite Internet
- ➔ Provided virtual media support for file applications, OS patching, software installation, and diagnostic testing
- ➔ Provided support for multiple video interfaces

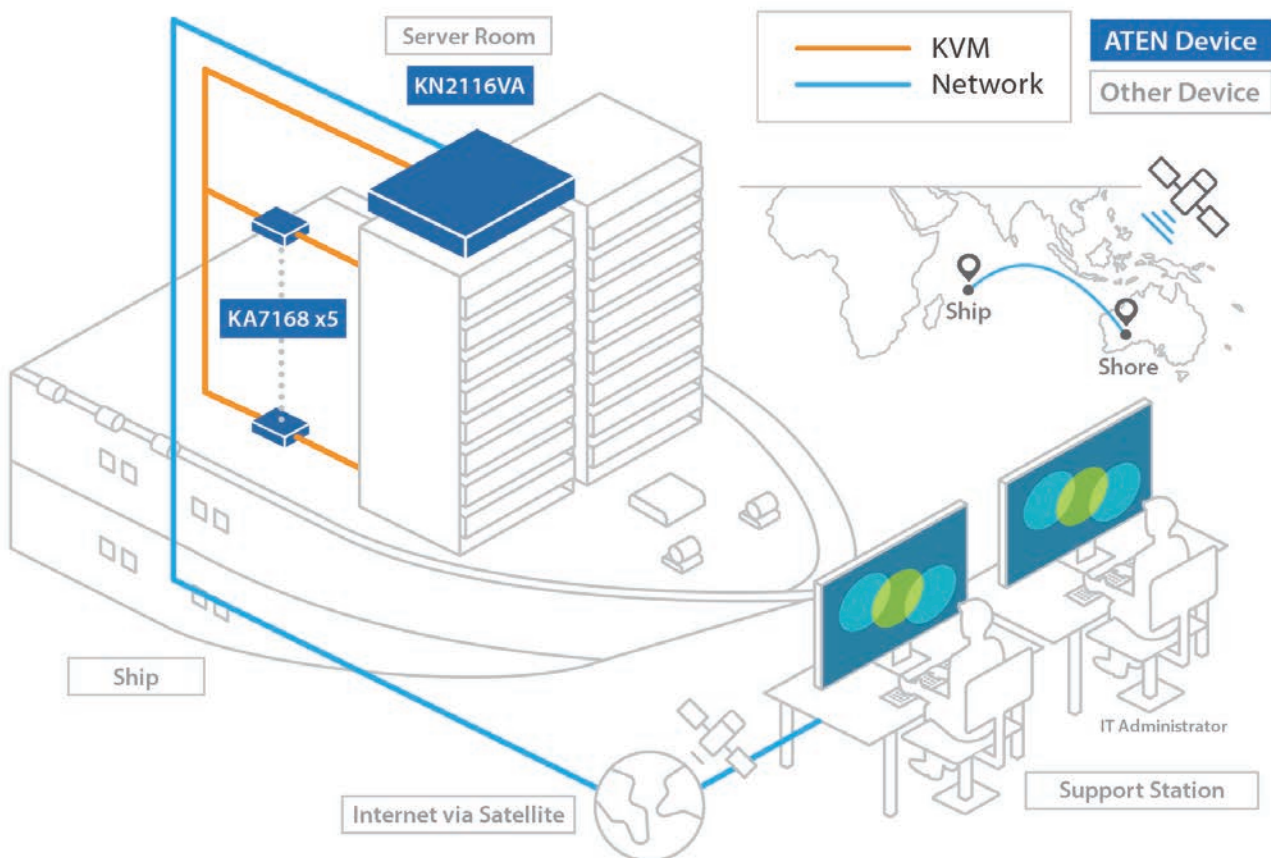
### KN2116VA

16-Port Cat 5 KVM over IP Switch with Virtual Media



### KA7168

KVM Adapter Cable







## 02

### Remote Access for Surveillance / Incident Detection

#### High-tech Production Line

A manufacturer of LCD panels, with several manufacturing and assembly plants performing processes that required non-intrusive surveillance of clean and sterile environments, needed a remote monitoring solution for its production line that minimized the need to enter and leave the fab. The solution needed to not take up system resources but was required to provide instant visibility for remote operators and to record all operations for efficient incident detection and troubleshooting.

## The ATEN Solution

- ➔ Provided centralized remote access and control of production lines that was able to be prioritized
- ➔ Avoided repeated local access which was time-consuming, inconvenient, and risked environmental contamination
- ➔ Provided a secure solution that took up minimal space while allowing the recording of all operations

## CN8600

### Single Port DVI KVM over IP Switch

## Single Port DVI KVM over IP Switch



## CC2000

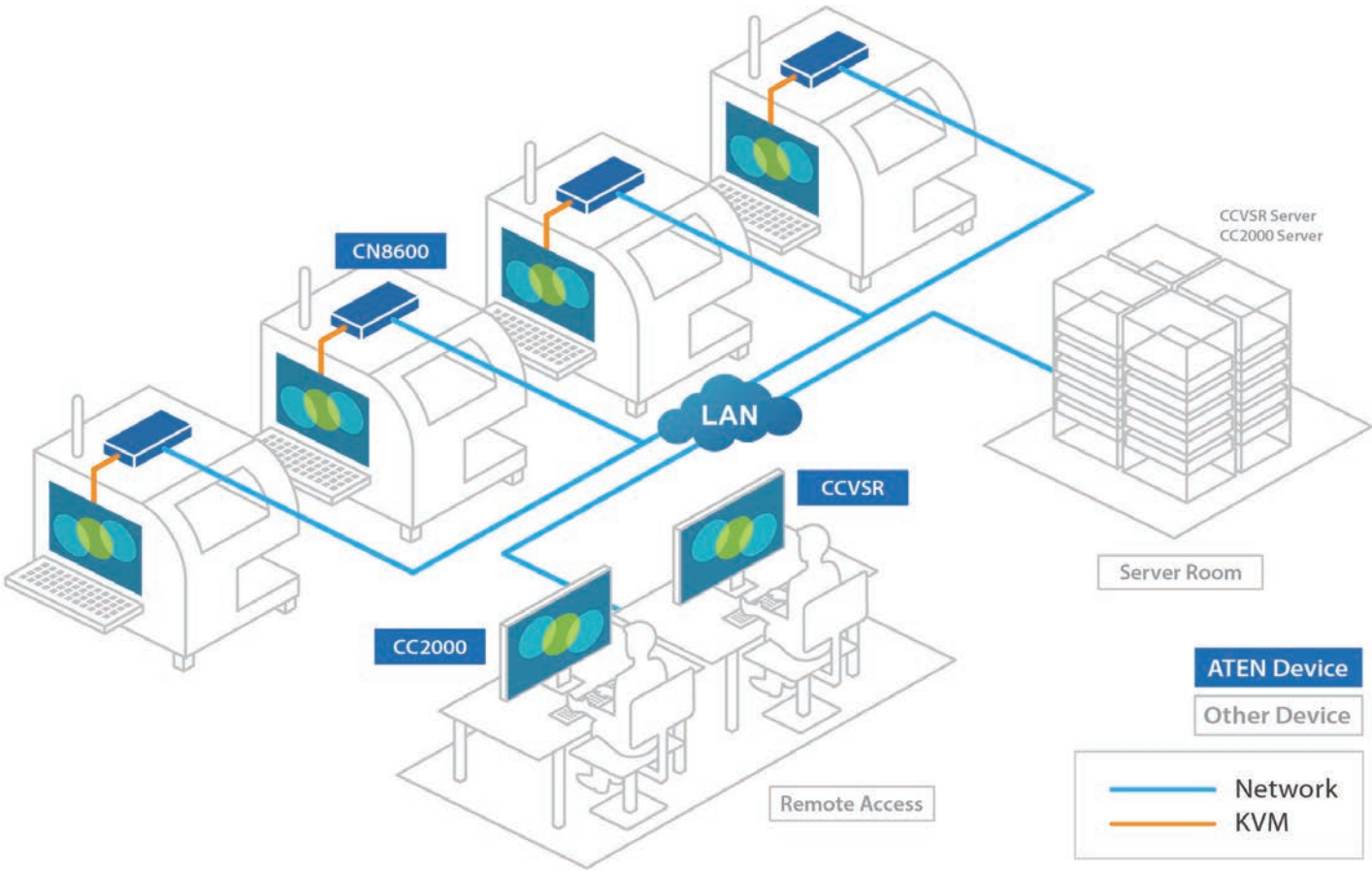
### Centralized Management Software

## Centralized Management Software



**CCVSR**  
Video Session Recording Software

## Video Session Recording Software





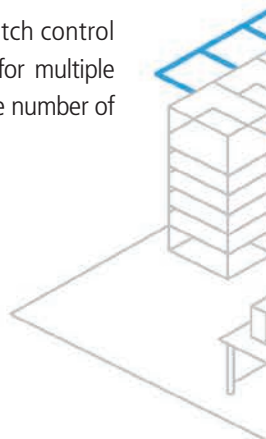


# 03

## Complete Remote Management Solution for Distributed Utilities

### **Power Distribution Company**

A state-owned power distribution company with widely distributed facilities was looking to upgrade their dispatch control center to remotely monitor dual and single-display workstations while incorporating an additional KVM solution for multiple communication control servers. They required a total access management solution for monitoring and managing a large number of different remote devices over IP that also included power management and protection to ensure 24-7 operation.



## The ATEN Solution

- ➔ Provided remote management capabilities and desktop extension of multiple workstations distributed across different areas of the power distribution system
- ➔ Provided remote data center access from the communication control departments to servers, network switches, PDUs, and UPS
- ➔ Provided a real-time power management and protection solution with environmental data monitoring and both power and network surge protection

### KN4132VA

32-Port Cat 5 KVM over IP Switch with Virtual Media (1920 x 1200)



### SN0132CO

32-Port Serial Console Server with Dual Power/LAN



### PE6208AV

Outlet Metered and Switched PDU



### OL3000HV

Professional Online UPS



### CCVSR

Video Session Recording Software



### CC2000

Centralized Management Software



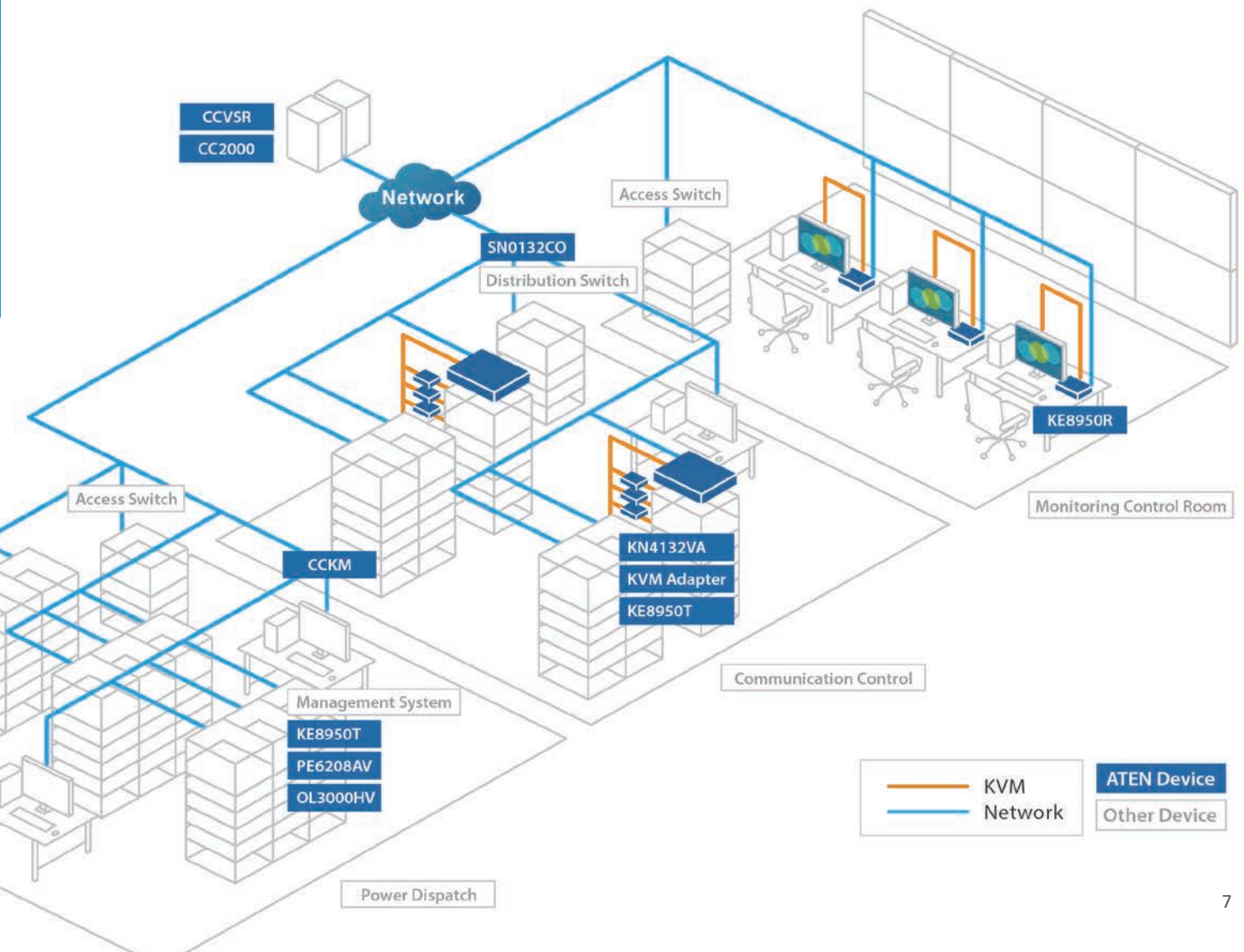
### eco DC

Energy & DCIM Management Web GUI



### KE8950

4K HDMI Single Display KVM over IP Extender





# ATEN Featured Products

## KVM over IP Switch / Extender

### KN2116VA

16-Port Cat 5 KVM over IP Switch with Virtual Media



### KN4132VA

32-Port Cat 5 KVM over IP Switch with Virtual Media



- Advanced FPGA graphics processor – with a Full HD resolution of 1920 x 1200
- ATEN exclusive Panel Array Mode™ – simultaneous monitoring for both local console operators and remote access users
- High-grade security – supports FIPS 140-2 level 1 security standards that use an embedded FIPS 140-2 certified OpenSSL cryptographic module

### CN8600

Single-Port DVI KVM over IP Switch



- High-resolution video – up to 1920 x 1200 @ 60Hz RB for both local and remote consoles
- Supports TLS 1.2 data encryption and RSA 2048-bit certificates to secure user logging in from browsers
- Virtual Media Support

### KE8950

4K HDMI Single-Display KVM over IP Extender



- Ultra high definition (UHD) video quality – up to 3840 x 2160 @ 30Hz (4:4:4); 36-bit color depth
- Flexible connections – allows multiple extender and matrix connections for multi-display installations and video wall applications
- Supports single-mode and multi-mode SFP module up to 10 km
- Push and Pull – share content instantly with just one click



## Serial Console Server

### SN0132CO

32-port Serial Console Server with Dual Power/LAN



- Secure in-band and out-of-band remote serial console access
- Versatile serial operating modes – Console Management, Console Management Direct, Real COM Port, TCP Server/Client, UDP Server/Client, and Virtual Modem
- Auto-sensing DTE/DCE feature supports a direct connection to Cisco network switches (and other compatible devices) without rollover cables for more convenient IT infrastructure deployment
- Online/Offline detection of connected serial devices (including terminal blocks) – automatically send event notifications when the devices are offline for device status monitoring

## eco PDU

### PE6208AV

Outlet Metered and Switch PDU



- Detachable front panel fits 19" racks with different depths
- Supports RS-232 port and power outlet control (On/Off) by outlet group
- Remote and local power outlet control (On/Off, Power Cycle) by individual outlets and outlet groups
- Proactive Overload Protection (POP) – automatically powers off the last outlet that caused the current overload to protect high-end pro-AV equipment and servers

### OL3000HV

Professional Online UPS



- True double-conversion – output power factor is 1 (maximum), which means all of the power supplied is being used for productive work
- Programmable power management outlets – Users can easily and independently control load segments. During power failure, this feature enables users to extend battery time to mission-critical devices by shutting down noncritical devices
- Emergency Power Off function (EPO) – EPO connector on rear panel allows emergency UPS Power Off from a remote location
- SNMP + USB + RS-232 multiple communications – allows either USB or RS-232 communication ports to work with SNMP interface simultaneously

## Management Software

### CC2000

Centralized Management Software



- Single sign-on to consolidate the management of ATEN's KVM over IP switches, serial console servers, intelligent PDU, and third party devices such as embedded service processors, and physical and virtual servers
- Supports Windows AD, LDAP, Kerberos, RADIUS, and TACACS+ for centralized authentication and authorization
- Consolidates logs from ATEN's KVM over IP switches, serial console servers, and other devices through syslog protocol for audit trail
- Provides server redundancy through primary/secondary CC2000 servers for service availability

### CCVSR

Video Session Recording Software



- Records user sessions from system boot up (BIOS) for visual playback when users access ATEN over IP KVM switches and serial console servers
- Incident Investigation – easily search through captured sessions for trouble tracing and problem solving
- LiveView function to provide real-time monitoring of user sessions that are being recorded
- Service Failover – provides failover through primary-and-secondary architecture for service availability

### eco DC

Energy & DCIM Management Web GUI



- Remote real-time power measurement and monitoring
- Second window to monitor a data center's PUE, RTI, RCI, Power, Carbon Footprint, and rack status
- Remote real-time power outlet management
- Remote real-time environment sensor monitoring

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## About ATEN

ATEN International Co., Ltd., established in 1979, is the leading provider of AV/IT connectivity and management solutions. Offering integrated KVM, professional AV, and intelligent power solutions, ATEN products connect, manage, and optimize AV/IT equipment in corporate, government, education, broadcasting and media, and transportation environments. ATEN has 570+ issued international patents and a global R&D team that produces a constant stream of innovative solutions, resulting in a comprehensive portfolio of products available worldwide.