

# 16/32-Port KVM over IP OmniBus Gateway

## KG0016 / KG0032

The KG0016 / KG0032 16/32-Port KVM over IP OmniBus Gateway provides remote over IP access, allowing users to access, monitor, and control up to 16/32 servers over a network. With KG0016 / KG0032's independent remote connections, it ensures higher operation efficiency and optimizes the user experience by eliminating waiting time and bus sharing. This single management platform connects servers through a single secure portal, simplifying access and control for efficient administration. With its all digital KVM over IP architecture, the KG0016 / KG0032 prevents video lagging and freezing, ensuring stable and smooth video display, particularly in long-distance extension application. Equipped with dual on-board 10G NICs for redundancy, this series is built to guarantee reliability and availability of remote access to all servers. The virtual media transmissions are faster than traditional KVM over IP switches, allowing for the completion of a 1GB file transmission in just one minute. When the KG series works with the KVM DigiProcessor series (KG1900T / KG6900T / KG8900T / KG9900T), it delivers superior video resolutions up to 1920 x 1200 @ 60 Hz, for distances up to 100 meters over a single Cat 5e/6 cable.

The KG series can be remotely accessed via WinClient AP or HTML5 WebClient\* at a console from a separate location for management and operation. The WinClient AP comes with complete KVM functions and provides users with continuous, reliable connections. It can help users to simultaneously monitor the status of all connected servers on Array View and control a specific server through Control View. For basic KVM functions, users can directly access and control one of the ports through the HTML5 WebClient by simply launching a client viewer from a browser, without the need for pre-installed software. Additionally, it allows users to easily separate the client viewer from the browser and drag it to a second monitor for control while monitoring the status of all ports on the Port View from Web GUI.

This KVM over IP OmniBus Gateway allows out-of-band access to connected servers from remote consoles via the management network for BIOS-level troubleshooting when the production network is down. It enables IT administrators to manage servers via management networks that are separated from the main / production networks. If there's difficulty in accessing the servers through the production network, administrators can still access servers via KG series. To provide stringent security, the KG series offers TLS 1.3 and an embedded FIPS 140-2 certified OpenSSL cryptographic module. Security features of the KG series include 256-bit AES encryption for secured data transmissions, as well as RADIUS, LDAP, LDAPS, and MS Active Directory for 3rd-party authentication services.

Additional exclusive features of KG series include a Message Board, Panel Array Mode™ Live+, Mouse DynaSync™, and a front panel LCD display. ATEN KVM over IP OmniBus Gateway saves users time and money by enabling administrators to manage their servers from virtually anywhere – minimizing travel and MTTR (Mean Time to Repair) costs, ensuring the highest availability for data center services.

**Note:**

We recommend using the WinClient app for more robust management and control. Performance and usage may vary depending on the user's hardware configuration. A minimum of 8 GB RAM, dual core CPU, and a graphics card that supports OpenGL are required. Please also make sure that the browser used is up to date.

KG0016 Front View



KG0032 Front View



KG0016 Rear View



KG0032 Rear View



## Features

### Hardware

- High port density – RJ-45 connectors and Cat 5e / 6 cable for up to 16/32 ports in 1U housing (KG0016 / KG0032)
- All-digital KVM over IP optimum transmission – offers reliable transmission over long distances with noise immunity, signal quality preservation, and efficient compression and storage
- Extends 1920 x 1200 @ 60 Hz resolutions up to 100m via Cat 5e/6 without signal interference and close-to-zero latency
- Up to 16/32 independent connections for remote KVM over IP access
- Dual 10G NICs for redundant LAN or two IP operation
- LCD display – provides real-time connection status, notifications, and system alert message
- LED indication of connection and hardware status
- Multi-platform server environments: Windows, Mac, and Linux
- All-around ventilation chassis design improves airflow efficiency – induces cold air suction on both sides at the front panel and dissipates heat via ventilation holes on the back panel
- Dual power supply with power redundancy

### Management

- Simultaneously shares 16/32 independent connections to the attached servers (KG0016 / KG0032)
- Out-of-Band access
- Green IT Fan – auto-fan-speed adjustment corresponding to temperature
- Event logging and Windows-based log server
- Event notification – supports notification of SMTP email, SNMP Trap, and SMS (with additional mobile devices)
- Event destination – event logs will be saved to Log server, Syslog server, and USB drive
- Firmware upgradeable
- Port share mode – allows multiple users to gain access to a server simultaneously
- Supports IPv4, IPv6

### Easy-to-Use Interface

- The intuitive WinClient AP's supports of an Array View and a Control View – enables users to monitor all servers and control a specific server concurrently
- Panel Array Mode™ Live+ – real-time monitoring of livestreamed video feeds from all ports in a configurable multi-screen layout
- Browser-based, and AP GUIs offer a unified multi-language interface to minimize user training time and increase productivity
- Multiplatform client support (Windows, Mac OS X, and Linux) via WebClient
- Multi-browser support – Edge, Chrome, Firefox, Safari, and Opera
- Supports web-friendly KVM-over-IP access with HTML5 WebClient viewer – users can remotely access all the connected servers and PCs without Java or browser plug-in installation
- Full-screen or sizable and scalable virtual remote desktop
- Keyboard / mouse broadcast – keyboard and mouse signals can be duplicated across all servers simultaneously

### Security

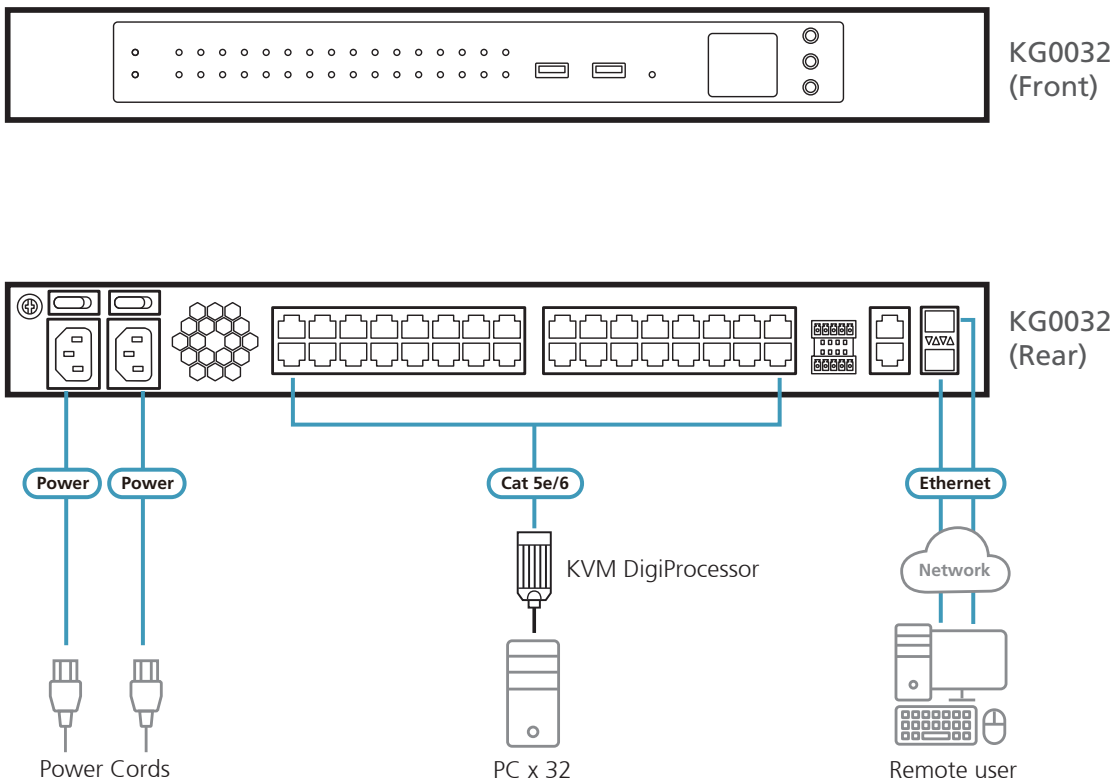
- High-grade security – supports an embedded FIPS 140-2 certified OpenSSL cryptographic module (Certificate #4282)
- Remote authentication support: RADIUS, LDAP, LDAPS, and MS Active Directory
- Supports TLS 1.3 data encryption and RSA 2048-bit certificates to secure user logins in from browser
- Flexible encryption design allows users to choose any combination of 56-bit DES, 168-bit 3DES, 256-bit AES, 128-bit RC4, or random for video, and virtual media data encryption
- Support for IP / MAC filter
- Configurable user and group permissions for server access and control
- Automated CSR creation utility and third party CA certificate authentication

### Virtual Media

- Virtual media transmission rate is approximately 10 times faster than traditional KVM, ideally for file transfers, OS patching, software installation, and diagnostic testing
- Works with USB-enabled servers in operating system and at the BIOS level
- Supports USB2.0 DVD / CD drives, USB mass storage devices, PC hard drives, and ISO images

### Virtual Remote Desktop

- Video quality such as monochrome color depth and bandwidth's increment / decrement can be adjusted for optimizing data transfer speed
- Mouse DynaSync™ – automatically synchronizes remote mouse movements
- On-screen keyboard with multi-language support
- BIOS-level access for troubleshooting



## Specifications

|                                   | KG0016  | KG0032                             |
|-----------------------------------|---|------------------------------------|
| <b>Console Connections</b>        |   |                                    |
| Local                             |   | N/A                                |
| Remote                            | 16  | 32                                 |
| <b>Computer Connections</b>       |   |                                    |
| Direct                            | 16  | 32                                 |
| <b>Port Selection</b>             |   |                                    |
| GUI                               |   |                                    |
| <b>Connectors</b>                 |   |                                    |
| USB Port                          | 2 x USB Type-A Female (reserved for future expansion) |                                    |
| KVM Ports                         | 16 x RJ-45 Female                                     | 32 x RJ-45 Female                  |
| Serial                            | 2 x RJ-45 Female (reserved for future expansion)      |                                    |
| SFP+ Uplink Ports                 | 2 x SFP+ Slots  |                                    |
| Power                             | 2 x IEC 60320/C14                                     |                                    |
| Input                             | 2 x 2-pin DI (reserved for future expansion)          |                                    |
| Relay                             | 2 x 3-pin Relay (reserved for future expansion)       |                                    |
| <b>Switches</b>                   |   |                                    |
| Reset                             | 1 x Semi-recessed Pushbutton                          |                                    |
| Power                             | 2 x Rocker Switches                                   |                                    |
| <b>LEDs</b>                       |   |                                    |
| KVM Ports                         | 16 (Green)  | 32 (Green)                         |
| Power                             | 2 (Green)   |                                    |
| <b>Panel Spec</b>                 |   |                                    |
| Size                              | 1.6"  |                                    |
| Resolution                        | 128x64  |                                    |
| <b>Pushbuttons</b>                |   |                                    |
| Select                            | 3 x Pushbuttons (Up, Down, Enter)                     |                                    |
| <b>Emulation</b>                  |   |                                    |
| Keyboard / Mouse                  | USB   |                                    |
| <b>Video</b>                      |   |                                    |
| Remote                            | 1920 x 1200 @ 60 Hz                                   |                                    |
| <b>Maximum Input Power Rating</b> |   |                                    |
| 100–240 V~ ; 50-60 Hz; 1A         |   |                                    |
| <b>Power Consumption</b>          |   |                                    |
|                                   | AC 110 V:34.1 W<br>AC 220 V:34.6 W                    | AC 110 V:46.8 W<br>AC 220 V:46.9 W |
| <b>Environmental</b>              |   |                                    |
| Operating Temperature             | 0 – 40 °C   |                                    |
| Storage Temperature               | -20 – 60 °C   |                                    |
| Humidity                          | 10 - 80% RH, Non-condensing                           |                                    |
| <b>Physical Properties</b>        |   |                                    |
| Housing                           | Metal   |                                    |
| Weight                            | 6.43 kg   | 6.53 kg                            |
| Dimensions (L x W x H)            | 43.36 x 37.90 x 4.40 cm                               |                                    |

