

## 8/16-Port PS/2-USB VGA LCD KVM over IP Switch with Daisy-Chain Port and USB Peripheral Support

CL5708I (CL5708IM: 17" LCD; CL5708IN: 19" LCD)

CL5716I (CL5716IM: 17" LCD; CL5716IN: 19" LCD)

- The CL5708I / CL5716I Slideaway™ LCD KVM Switch is a control unit that allows access to multiple computers from a single PS/2 or USB KVM (keyboard, video, and mouse) console. A single CL5708I or CL5716I can control up to 8 or 16 computers. As many as 15 additional KVM switches can be daisy-chained to the CL5708I / CL5716I, so that up to 128 / 256 computers can all be controlled from a single KVM console.

The CL5708I / CL5716I LCD KVM Switch is an IP-based KVM control unit that allows both local and remote operators to monitor and access multiple computers. Remote users access the switches over the Internet by means of a web browser using TCP/IP for its remote communications protocol. The CL5708I / CL5716I supports up to 32 concurrent user logins for a single-bus computer access. A built-in feature that resembles an Internet chat program - the Message Board - lets them communicate with each other. The ability to exchange information in real time allows them to cooperatively manage the installation in a smooth and efficient manner.

The CL5708I / CL5716I offers a space-saving, streamlined approach to KVM switch technology by integrating a keyboard, 17" or 19" LED-backlit LCD monitor, and touchpad in a 1U rack-mountable sliding housing. In addition, since the CL5708I / CL5716I is built on a modular design, the KVM section can be detached from the switch section for convenient maintenance and repair.

Among CL5708I / CL5716I's other outstanding features, the Panel Array Mode provides the ability to monitor the video output of the servers on the installation; while the Mouse DynaSync™ feature automatically synchronizes the local and remote mouse pointer movements for perfect alignment regardless of what the mouse acceleration settings on the server are.

The CL5708I / CL5716I supports the highest security protocols, such as TLS 1.2 encryption for the browser, and RC4 128 bit encryption for secure keyboard, mouse, and video data transmission. For easier and more efficient user management integration, the CL5708I / CL5716I also supports authentication and authorization via 3rd party authorized servers, such as RADIUS, LDAP, LDAPS, and MS Active Directory.

CL5716I Front View



CL5716I Rear View



## Features

### Hardware

- Exclusive LED illumination light - designed by ATEN to illuminate the keyboard and touchpad to allow visibility in low-light conditions
  - Integrated KVM console with 17" or 19" LED-backlit LCD monitor in a Slideaway™ housing
  - Space saving technology - up to two consoles (one bus) control up to 8/16 computers
  - Daisy chain up to 15 additional units – control up to 128 (CL5708I) or 256 (CL5716I) computers from a single console (With compatible KVM Switches: ACS1208A, ACS1216A, CS1708A, CS1716A)
  - Extra console port – manage computers from an external console (VGA monitor, USB or PS/2 keyboard and mouse)
  - Superior video quality - up to 1280 x 1024 @75 Hz; DDC2B for the local console; up to 1920 x 1200 @ 60Hz / 24 bit color depth for remote sessions
  - Dual Interface - supports computers and console with PS/2 or USB keyboards and mice
  - LCD module USB port allows connected computers to access USB peripherals\*
  - Auto-sensing of station's position on daisy chained installations; no need for manual dip switch setting; front panel LED indicates station's position
  - Hot pluggable - add or remove computers without having to power down the switch
  - Keyboard and mouse emulation (PS/2 and USB) for smooth switching and simultaneous booting of multiple computers even when the console focus is elsewhere
  - Supports multimedia USB keyboards for Windows, Mac and Sun
  - Supports external USB mouse
  - Video DynaSync™ - stores the console monitor's EDID (Extended Display Identification Data) to optimize display resolution
  - Rack mountable in a 1U system rack
  - LCD module rotates up to 115 degrees for a more comfortable viewing angle
- \* The USB peripheral function only works with USB cable set connections. It will not work with PS/2 cable set connections.

### Management

- Convenient computer selection via front panel pushbuttons, hotkeys and multilingual on-screen display (OSD) menus
- Up to 32 concurrent logins
- Multilanguage web UI support featuring a tree-structured local and remote OSD
- Adjustable video quality for flexible adaptation to diverse network environments
- Auto Scan mode enables continuous monitoring of user-selected computers
- Broadcast mode: operations from the keyboard can be simultaneously performed on all selected computers on the installation (software installation, system-wide shutdown, etc.)
- Firmware upgrades to all the daisy-chained KVM switches (CS1708A, CS1716A) at the same time via the daisy-chain cable
- Integration with CC2000 Centralized Management Software
- Backup and restore configuration and user account settings
- Event logging
- IPv6 capable

### Ease-to-Use Interface

- Browser-based and AP GUIs, together with a menu-driven OSD for the local console, provide a powerful, intuitive, user-friendly, multi-language interface to minimize user training time and increase productivity
- Multiplatform support - Windows, Linux, Mac, and Sun
- Multi-browser support (IE, Mozilla, Firefox, Safari, Opera, Netscape)
- Panel array mode enables user to monitor multiple servers from single screen at the same time - each selected server's video output appears in a separate panel - users can easily select the number of panels to view
- Windows client and Java client software support; Java client works with all operating systems
- Beeper on/off via hotkey and OSD
- Keyboard Language support: English (US), English (UK), French, German, German (Swiss), Greek, Hungarian, Italian, Japanese, Korean, Russian, Spanish, Swedish and Traditional Chinese

### Advanced Security

- Secure keyboard/mouse/video transmission via RC4 128 bit encryption
- Supports TLS 1.2 data encryption and RSA 2048 bit certificates for secure user logins from a browser
- Two level password security - only authorized users can view and control computers; up to 64 user accounts with separate profiles for each
- External (Remote) authentication support: RADIUS, LDAP, LDAPS, MS Active Directory
- Support for IP/MAC Filter
- Local and remote access logged and authenticated

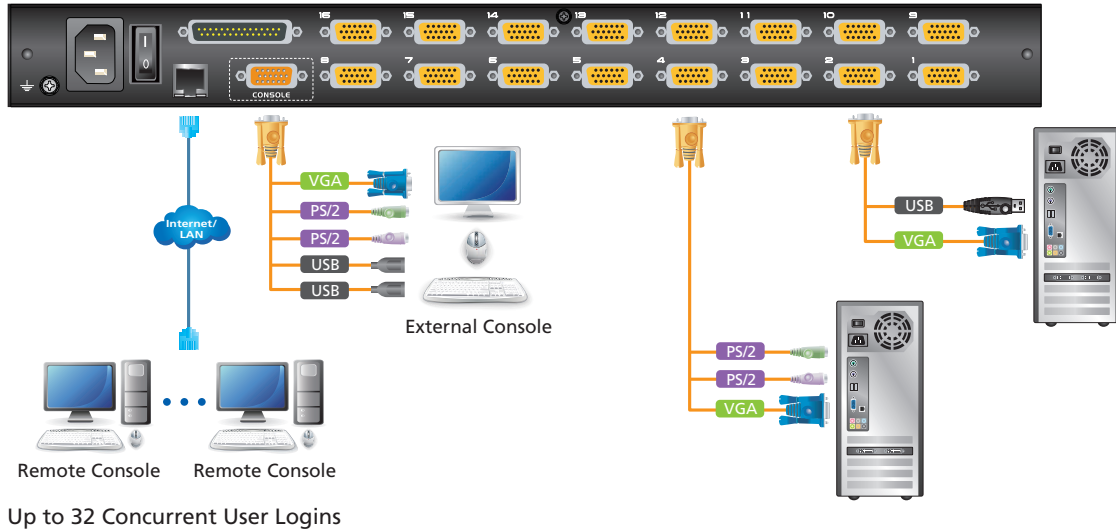
### Virtual Remote Desktop

- Resizable remote desktop window
- Message board allows logged-in users to communicate with each other, and allows a user to take exclusive control of the KVM functions
- Mouse DynaSync™
- On-screen keyboard with multi-language support
- BIOS-level access

## Highlights

|                                   |  |
|-----------------------------------|--|
| <b>Space Efficient</b>            | The CL5708I / CL5716I provides a streamlined method to conserve server room rack space by integrating a retractable LCD monitor, keyboard, and touchpad in a 1U single rail housing that is designed to install easily and operate smoothly.   |
| <b>Ease-to-use user interface</b> | A user-friendly and intuitive GUI provides convenient access, configuration and operation. Local Console, browser-based and AP GUIs offer a unified multi-language interface to minimize user training time and increase productivity.   |
| <b>Virtual Remote Desktop</b>     | The remote desktop can appear full-screen. Advanced features such as the Message Board and Mouse DynaSync™, create a Virtual Remote Desktop that allows users to operate servers from remote locations just as if they were actually at the local site.  |
| <b>Superior Video</b>             | With enhanced fps throughput for crisp responsive video display, CL5708I / CL5716I offers resolution of up to 1920 x 1200 @ 60Hz, with vibrant 24-bit color depth for rich remote session display.   |
| <b>Panel Array Mode</b>           | Panel array mode permits simultaneous monitoring of the video output of the installations' servers. Operators can monitor the screen display of multiple servers for real-time server monitoring.  |
| <b>Message Board</b>              | To alleviate the problem of access conflicts arising from multiple logins, the Message Board functions like an Internet chat program, allowing users who are logged in to instantly communicate with each other.   |
| <b>Mouse DynaSync™</b>            | Automatically synchronizes the local and remote mouse movements for perfect alignment of mouse pointers, regardless of server mouse acceleration settings. For Mouse DynaSync™ support, USB Adapter cables must be used on all connected ports.  |
| <b>Broadcast mode</b>             | When this function is in effect, commands sent from the console are broadcasted to all available computers on the installation. This function is particularly useful for operations that need to be performed on multiple computers, such as performing a system wide shutdown, installing or upgrading software, etc. |

### CL5716I (Rear)



## Optional

### Single Person Easy Installation Kit

Slideaway™ LCD KVM switches allow you to choose from a host of optional rack mount kits to meet your needs, including the Single Person Easy Installation Rack Mount Kit, which streamlines the rack mounting process.

Normal rack mounting procedures call for at least two people to rack mount a KVM switch. The Single Person Easy Installation Rack Mount Kit enables one person to rack mount a Slideaway™ LCD KVM switch. In just a matter of minutes, your new Slideaway™ LCD KVM switch can go from the box to the rack.

For convenience and flexibility, there is one standard, and three optional rack mounting kits available:



| Rack Mount Kit             | Depth (cm) |          |
|----------------------------|------------|----------|
| 2X-010G<br>(Long/Optional) | 17"        | 68 - 105 |
|                            | 19"        | 70-105   |
| Short (Standard)           | 17"        | 42 - 82  |
|                            | 19"        | 52-85    |

| Easy Installation Rack Mount Kit | Depth (cm) |       |
|----------------------------------|------------|-------|
| 2X-012G (Long/Optional)          | 68-105     |       |
| 2X-011G (Short/Optional)         | 17"        | 52-70 |
|                                  | 19"        | 57-70 |

# Specifications

| Funtion                           | CL5708IM                           | CL5708IN                | CL5716IM                           | CL5716IN                |
|-----------------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|
| <b>Computer Connections</b>       |                                    |                         |                                    |                         |
| Direct                            | 8                                  |                         | 16                                 |                         |
| Maximum                           | 128 (via Daisy-chain)              |                         | 256 (via Daisy-chain)              |                         |
| <b>Port Selection</b>             | OSD, Hotkey, Pushbuttons           |                         | OSD, Hotkey, Pushbuttons           |                         |
| <b>Connectors</b>                 |                                    |                         |                                    |                         |
| External Console Ports            | 1 x SPHD-18 Male (Yellow)          |                         | 1 x SPHD-18 Male (Yellow)          |                         |
| External Mouse Port               | 1 x USB Type-A Female              |                         | 1 x USB Type-A Female              |                         |
| KVM Ports                         | 8 x SPHD-17 Female (Yellow)        |                         | 16 x SPHD-17 Female (Yellow)       |                         |
| Daisy Chain Ports                 | 1 x DB-25 Male (Black)             |                         | 1 x DB-25 Male (Black)             |                         |
| Firmware Upgrade                  | 1 x RJ-11 Female                   |                         | 1 x RJ-11 Female                   |                         |
| Power                             | 1 x 3-prong AC Socket              |                         | 1 x 3-prong AC Socket              |                         |
| USB Port                          | 1 x USB Type A Female              |                         | 1 x USB Type A Female              |                         |
| LAN Ports                         | 1 x RJ-45 Female                   |                         | 1 x RJ-45 Female                   |                         |
| <b>Switches</b>                   |                                    |                         |                                    |                         |
| Reset                             | 1 x Semi-recessed Pushbutton       |                         | 1 x Semi-recessed Pushbutton       |                         |
| Power                             | 1 x Rocker Switch                  |                         | 1 x Rocker Switch                  |                         |
| Firmware Upgrade                  | 1 x Switch                         |                         | 1 x Switch                         |                         |
| LCD Adjustment                    | 4 x Pushbutton                     |                         | 4 x Pushbutton                     |                         |
| LCD On/Off                        | 1 x LED Pushbutton (Orange)        |                         | 1 x LED Pushbutton (Orange)        |                         |
| Port Selection                    | 2 x Pushbutton                     |                         | 2 x Pushbutton                     |                         |
| Station Selection                 | 2 x Pushbutton                     |                         | 2 x Pushbutton                     |                         |
| <b>LEDs</b>                       |                                    |                         |                                    |                         |
| Port ID                           | 2 x 7-segment LED Display (Yellow) |                         | 2 x 7-segment LED Display (Yellow) |                         |
| Station ID                        | 2 x 7-segment LED Display (Yellow) |                         | 2 x 7-segment LED Display (Yellow) |                         |
| Power                             | 1 (Dark Green)                     |                         | 1 (Dark Green)                     |                         |
| Lock                              | 1 x Num Lock (Green)               |                         | 1 x Num Lock (Green)               |                         |
|                                   | 1 x Caps Lock (Green)              |                         | 1 x Caps Lock (Green)              |                         |
|                                   | 1 x Scroll Lock (Green)            |                         | 1 x Scroll Lock (Green)            |                         |
| Online                            | 8 x (Orange)                       |                         | 16 x (Orange)                      |                         |
| <b>Panel Spec</b>                 |                                    |                         |                                    |                         |
| LCD Module                        | 17" TFT-LCD                        | 19" TFT-LCD             | 17" TFT-LCD                        | 19" TFT-LCD             |
| Response time                     | 5 ms                               |                         | 5 ms                               |                         |
| Viewing Angle                     | 170° (H), 160° (V)                 |                         | 170° (H), 160° (V)                 |                         |
| Pixel Pitch                       | 0.264 mm x 0.264 mm                | 0.294 mm x 0.294 mm     | 0.264 mm x 0.264 mm                | 0.294 mm x 0.294 mm     |
| Support Color                     | 16.7M colors                       |                         | 16.7M colors                       |                         |
| Contrast Ratio                    | 1000 : 1                           |                         | 1000 : 1                           |                         |
| Luminance                         | 250 cd/m <sup>2</sup>              |                         | 250 cd/m <sup>2</sup>              |                         |
| <b>Emulation</b>                  |                                    |                         |                                    |                         |
| Keyboard / Mouse                  | PS/2, USB                          |                         | PS/2, USB                          |                         |
| <b>Video</b>                      |                                    |                         |                                    |                         |
| Local                             | 1280 x 1024 @75 Hz; DDC2B          |                         | 1280 x 1024 @75 Hz; DDC2B          |                         |
| Remote                            | 1920 x 1200 @ 60 Hz                |                         | 1920 x 1200 @ 60 Hz                |                         |
| <b>Scan Interval</b>              | 1-255 sec.                         |                         | 1-255 sec.                         |                         |
| <b>Maximum Input Power Rating</b> | 100 - 240V AC, 50 - 60Hz, 1A       |                         | 100 - 240V AC, 50 - 60 Hz, 1A      |                         |
| <b>Power</b>                      |                                    |                         |                                    |                         |
| Consumption                       | 120V/15.2W; 230V/16W               | 120V/24W; 230V/25W      | 120V/17W; 230V/18W                 | 120V/26W; 230V/26.8W    |
| <b>Environmental</b>              |                                    |                         |                                    |                         |
| Operating Temperature             | 0° to 50° C                        |                         | 0° to 50°C                         |                         |
| Storage Temperature               | -20° to 60° C                      |                         | -20° to 60° C                      |                         |
| Humidity                          | 0 - 80% RH, Noncondensing          |                         | 0 - 80% RH, Noncondensing          |                         |
| <b>Physical Properties</b>        |                                    |                         |                                    |                         |
| Housing                           | Metal + Plastic                    |                         | Metal + Plastic                    |                         |
| Weight                            | 13.49 kg                           | 13.41 kg                | 13.61 kg                           | 13.67 kg                |
| Dimensions (L x W x H)            | 48.00 x 64.27 x 4.40 cm            | 48.00 x 68.92 x 4.40 cm | 48.00 x 64.27 x 4.40 cm            | 48.00 x 68.92 x 4.40 cm |

