

High-Density KVM Switches



KH1508/KH1516 • KH2508/KH2516 • KH0116

ALTUSEN High-Density KVM Switches offer 8 and 16 computer port configurations in a 1U-high housing for convenient rack mounting. They allow administrators to control multiple computers from up to two KVM (keyboard, video, mouse) consoles. All switches are capable of expansion to provide control of up to hundreds or thousands of computers for a flexible and economical solution to server room administration. Convenient features that help network administrators easily manage their server rooms include three selection methods (manual, OSD, and hotkey) to obtain instant access to any computer on the installation and a powerful Auto Scan function that permits scan interval setting and automatic scanning and monitoring of the activities of all computers running on the installation on a one-at-a-time basis.

ALTUSEN High-Density KVM Switches are available in several models offering multiplatform support. These include the KH0116, which, when combined with the KA9250 KVM Extender, can be accessed and controlled from a remote console up to 150 m away via Cat 5e cable, and the KH1508/1516, and KH2508/2516 Cat 5 KVM switches that feature RJ-45 connectors and Cat 5e/6 cable to link to the computers.

Comparison

Model		KH1508/KH1516	KH2508/KH2516	KH0116
Console		1	2	1
Ports		8/16	8/16	16
Console Connectors		PS/2; HDB-15	PS/2; USB; HDB-15	PS/2; HDB-15
Computer	Connector	RJ-45	RJ-45	SPHD
	Platform	PS/2, USB, Sun, Serial		PS/2, USB*, Sun**, Serial***
Maximum Connections		256/512 (Daisy-chain)	512/4096 (Cascade)	512 (Daisy-chain)
Console Extension				•
External Flash Drive for Configuration			•	
Extends distance between PC and Switch up to 40 m		•	•	
Non-blocked Access			•	

Notes:

* Custom KVM cables are available to allow PS/2, and USB systems to exist on the same installation.

** Sun to PS/2 converters are available to allow Sun systems to exist on the same installation.

*** Requires KA9140 Serial KVM Adapter Cable.

Depends on KVM Adapter Cable type.

Easy Installation

Setting up an ALTUSEN High-Density KVM Switch is fast and easy. All you have to do is simply plug the cables into their appropriate ports. And because the switch intercepts keyboard and mouse input directly, there is no software to configure; no need to get involved in complex installation routines; no need to be concerned with incompatibility problems.

Simple Space-saving Cabling

With Cat 5e/6 cable offering complete KVM connectivity in one slim cable, an ALTUSEN Cat 5 High-Density KVM Switch installation reduces cable bulk while the unit itself comes in 1U-high housing for convenient rack mounting.

Long-distance Transmission

The Cat 5 High-Density KVM Switches feature RJ-45 connectors and Cat 5e/6 cable to link to the computers. Combined with Signal Compensation, 1280 x 1024 signals can travel up to 40 m (130 ft) – eliminating the need for KVM extenders.

Multiplatform Support

Utilizing KVM Adapter Cables for the final linkup, ALTUSEN Cat 5 High-Density KVM Switches permit any combination of PCs, Macs, Sun computers, and serial devices to coexist on the installation.

Convenient Management Features

Access to any computer on the installation is easily accomplished – either by pressing the port selection pushbuttons located on the unit's front panel, entering hotkey combinations from the keyboard; or by means of a powerful menu driven OSD (On Screen Display) system. A convenient Auto Scan function also permits automatic scanning and one-by-one monitoring of the activities of selected computers.

Affordable, Expandable

An ALTUSEN High-Density KVM Switch installation is affordable right now, yet will allow you to protect your original investment and your future. You can start out small and then can easily add additional units as your business grows. When your installation is ready to expand, simply daisy-chain or cascade additional switches.

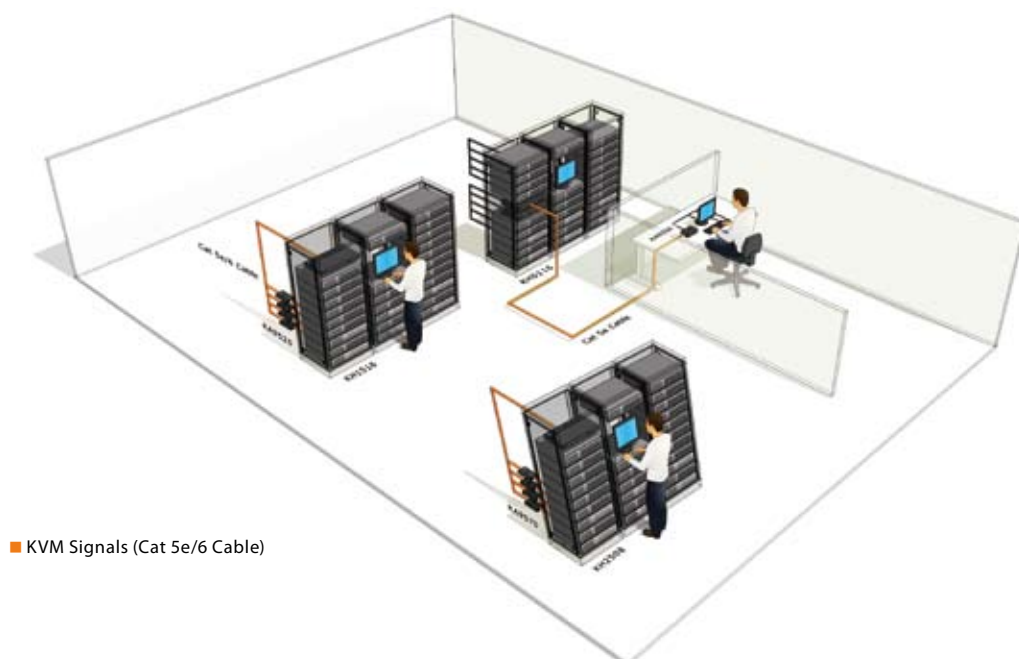
Dedicated Expansion Ports

KH1508 / KH1516 features dedicated chain ports so you can daisy-chain up to 31 additional for a maximum centralized control of 512 systems from your original console. KH2508 / KH2516 features dedicated dual RJ-45 cascade ports, allowing you expand KVM installations without the need for extra KVM cables.

Non-blocked Access*

Both consoles connected to the master switch have simultaneous access to any computer on the same level and also have independent access to any computer in the installation.

* Feature supported by KH2508 / KH2516 only.



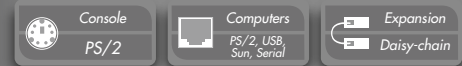
KH1508 / KH1516

Cat 5 High-Density KVM Switch



Features

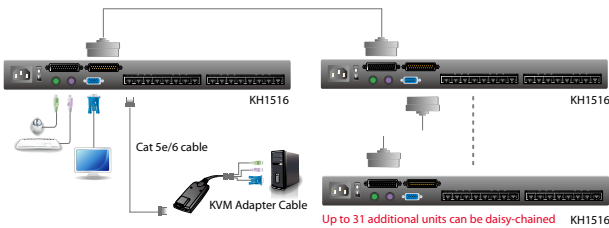
- A single console controls up to 8 (KH1508) or 16 (KH1516) computers
- Multiplatform support – PC, Mac, Sun and serial-based systems
- Dedicated chain ports – daisy-chain up to 31 additional units – control up to 512 computers from a single console
- Extends the distance between computers and switch – up to 40 m for resolutions of 1280 x 1024 @ 60Hz, 30m for resolution of 1600 x 1200 @ 60Hz
- No software required – convenient computer selection via port selection switches, Hotkeys and intuitive On Screen Display (OSD) menus
- No need for manual DIP switch setting – auto-sensing of station positions for daisy-chained installations
- LED indicates station's position
- Auto Scan Mode enables continuous monitoring of user-selected computers
- Broadcast Mode – Operations simultaneously performed on all selected computers, software installation and upgrading, system wide shutdown, etc.
- Hot Pluggable – add or remove computers without having to power down the switch
- Two-level password security – Administrator and up to four Users; only authorized users view and control the computers; separate profiles for each
- Supports high resolution video for superior picture quality – up to 1600 x 1200 @ 60Hz
- Firmware upgradeable



KH1508
• 8 ports

KH1516
• 16 ports

Setup



Optional Equipment/Software

- **Daisy Chain Cables**
2L-1700 (0.6m); 2L-1701 (1.8m); 2L-1703 (3m); 2L-1705 (5m); 2L-1715 (15m)
- **KVM Adapter Cables:**

Model	Function
KA9520	PS/2 KVM Adapter Cable
KA9570	USB KVM Adapter Cable
KA9130	Sun Legacy KVM Adapter Cable
KA9170	USB KVM Adapter Cable (PC/Mac/Sun)
KA9140	Serial KVM Adapter Module

* See Page 54 for KVM Adapter Cable Details

Accessories



1. Firmware Upgrade Cable x 1
2. Power Cord x 1
3. Rack Mount Kit x 1
4. Foot Pad Set (4 pcs.) x 1

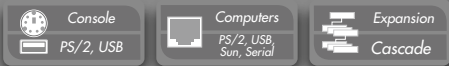


KH2508 / KH2516

2-Console Cat 5 High-Density KVM Switch



Features



2 Consoles



Graphical OSD

KH2508

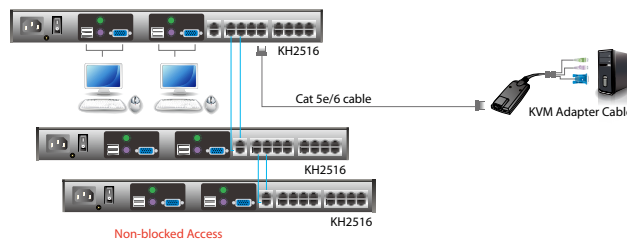
• 8 ports

KH2516

• 16 ports

- Two consoles independently and simultaneously control up to 8 or 16 directly connected computers
- Cascade up to 3 levels of KH2508 or KH2516 switches to support up to 512 or 4096 computers
- Non-blocked cascading allows both consoles on the master switch to access up to 1024 computers
- Superior video resolution – 1280 x 1024 @75 Hz up to 40 m; 1600 x 1200 @ 60 Hz up to 30 m
- Console conversion – any type of KVM console can control any type of computer; mixed combinations (PS/2 & USB) supported on both the KVM console and computer sides
- Multiplatform support – PC, Mac, Sun, and serial
- Connect USB flash drives for configuration backup and restore
- Supports two-level user access control
- Supports up to 96 user accounts
- Configure port access rights for users on a port-by-port basis
- Diversified port operation mode enables flexible computer management – Occupy, Exclusive and Share modes
- OSD port list automatically expands when stations are added
- Port names are automatically reconfigured when the station/computer sequence is changed
- OSD screen automatically adjusts to resolution changes
- Auto Scan mode enables continuous monitoring of user-selected computers
- User activity log support
- Dual Interface – supports computers and consoles with PS/2 or USB keyboards and mice
- USB / PS/2 keyboard and mouse emulation – computers boot even when the KVM console focus is elsewhere
- Firmware upgradeable

Setup



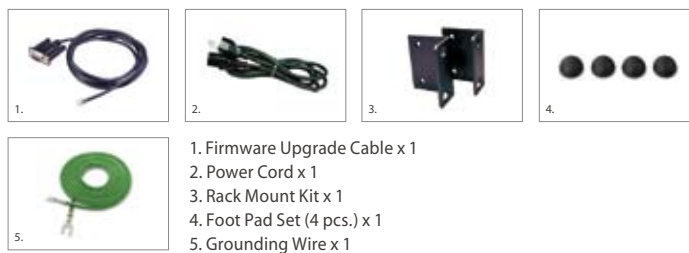
Optional Equipment/Software

• KVM Adapter Cables:

Model	Function
KA9520	PS/2 KVM Adapter Cable
KA9570	USB KVM Adapter Cable
KA9130	Sun Legacy KVM Adapter Cable
KA9170	USB KVM Adapter Cable (PC/Mac/Sun)
KA9140	Serial KVM Adapter Module

* See Page 54 for KVM Adapter Cable Details

Accessories



1. Firmware Upgrade Cable x 1
2. Power Cord x 1
3. Rack Mount Kit x 1
4. Foot Pad Set (4 pcs.) x 1
5. Grounding Wire x 1

KH0116 / KA9250

High-Density KVM Switch / Console Module



Features

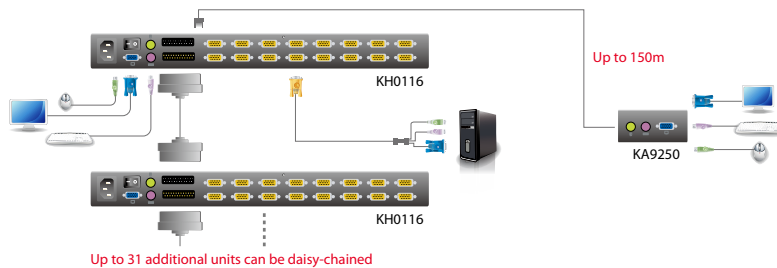
KH0116

- A single PS/2 console controls up to 16 computers
- Remote Console Operation – control your system from the remote PS/2 keyboard, mouse, and monitor consoles
- Cat 5e cable to connect the KH0116 and remote units (KA9250)
- Dedicated chain ports – daisy-chain up to 31 additional units – control up to 512 computers from a single console
- No software required – convenient computer selection via Hotkeys and intuitive On Screen Display (OSD) menus
- No need for manual DIP switch setting – auto-sensing of station positions for daisy-chained installations
- LED indicates station's position
- Auto Scan Mode enables continuous monitoring of user-selected computers
- Hot Pluggable – add or remove computers without having to power down the switch
- Two-level password security – Administrator and up for four Users; only authorized users view and control the computers; separate profiles for each
- Port names automatically reconfigured when station sequence is changed
- Supports high resolution video for superior picture quality – up to 2048 x 1536; DDC2B
- Firmware upgradeable

KA9250

- Built-in ASIC for greater reliability and compatibility
- Cat 5e cable to connect the remote unit to the KH0116 up to 150m away
- Supports high resolution video – up to 1280 x 1024 (SXGA)
- Supports VGA, SVGA, and MultiSync monitors
- Automatic gain control – adjusts signal strength to compensate for distance

Setup



Optional Equipment/Software

- **Daisy Chain Cables**
2L-1700 (0.6m); 2L-1701 (1.8m); 2L-1703 (3m); 2L-1705 (5m); 2L-1715 (15m)
- **PS/2 KVM Cables**
2L-5201P (1.2m); 2L-5202P/2L-5702P (1.8m); 2L-5203P (3m); 2L-5206P (6m)
- **Cables for USB interface support**
2L-5202UP (1.8m); 2L-5203UP (3m); 2L-5205UP (5m); 2L-5206UP (6m)
- **Converters for Sun interface support** (Page 53)
Sun (USB) compatible: CV131A; Sun (Legacy) compatible: CV130A

Accessories



1. PS/2 KVM Cables x 2
2. Firmware Upgrade Cable x 1
3. Power Cord x 1
4. Rack Mount Kit x 1



KH0116

- 16-Port KVM Switch

KA9250 Console Module



High-Density KVM Switches Specifications

		KH1508/KH1516	KH2508/KH2516	KH0116	
Computer Connections	Direct	8/16	8/16	16	
	Max.	256/512 (Daisy-chain)	512/4096 (Cascade)	512 (Daisy-chain)	
Port Selection		OSD, Hotkey, Pushbutton	OSD	OSD, Hotkey	
Connectors	Console Ports	Keyboard	1 x PS/2 (F)	2 x PS/2 (F); 2 x USB (F)	1 x PS/2 (F)
		Video	1 x HDB-15 (F)	2 x HDB-15 (F)	1 x HDB-15 (F)
		Mouse	1 x PS/2 (F)	2 x PS/2 (F); 2 x USB (F)	1 x PS/2 (F)
		USB	N/A	2 x USB (F)	N/A
	KVM Ports		8/16 x RJ-45 (F)	8/16 x RJ-45 (F)	16 x SPHD (F)
	Daisy-chain Ports	In	1 x DB-25 (F)	N/A	1 x DB-25 (F)
		Out	1 x DB-25 (M)		1 x DB-25 (M)
	Cascade Ports		N/A	2 x RJ-45 (F)	N/A
	F/W Upgrade		1 x RJ-11 (F)	1 x RJ-11 (F)	1 x RJ-11 (F)
	Rem. Console		N/A	N/A	1 x RJ-45 (F)
Power		1 x 3-prong AC Socket			
Emulation	Keyboard / Mouse	PS/2; USB	PS/2; USB	PS/2	
Video Resolution		1600 x 1200 @60Hz (30 m); 1280 x 1024 @60Hz (40 m)	1600 x 1200 @ 60 Hz (30 m); 1280 x 1024 @ 75Hz (40 m)	2048 x 1536; DDC2B	
I/P Rating		100–240VAC; 50/60 Hz; 1A			
Power Consumption		120V/15.5W; 230V/15.5W (KH1508) 120V/15.7W; 230V/15.7W (KH1516)	120V/28W; 230V/28W (KH2508) 120V/30W; 230V/30W (KH2516)	120V/8W; 230V/8W (Max)	
Environment	Operating Temp.	0–40°C	0–50°C		
	Storage Temp.	-20–60°C	-20–60°C		
	Humidity	0–80% RH, Non-condensing			
Physical Properties	Housing	Metal	Metal / Plastic	Metal	
	Weight	2.75 kg	3.68 kg (KH2508); 3.74 kg (KH2516)	3.56 kg	
	Dimensions (L x W x H)	43.72 x 16.10 x 4.40 cm (19"/1U)	43.36 x 28.78 x 4.40 cm (19"/1U)	43.70 x 21.00 x 4.40 cm (19"/1U)	

Console Module

		KA9250*
Connectors	Keyboard	1 x PS/2 (F)
	Video	1 x HDB-15 (F)
	Mouse	1 x PS/2 (F)
	Unit to Unit	1 x RJ-45 (F)
Video Resolution		1280 x 1024
Cable Length		150m
Power Consumption		AC 9V, 4W (max.)
Environment	Operating Temp.	0–50° C
	Storage Temp.	-20–60° C
	Humidity	0–80% RH, Non-condensing
Physical Properties	Housing	Metal
	Weight	0.22 kg
	Dimensions (L x W x H)	10.00 x 8.50 x 3.50 cm

Product specifications and appearance are subject to change without notice.
* Not Available in Europe.

Dual Rail LCD KVM Switches



KL1100 • KL9108/KL9116 • KL1508/
KL1516 • KL3116T • KL3116

With limited server room space and rising maintenance costs, network administrators are now more than ever looking for solutions that reduce both costs and space requirements. ALTUSEN LCD KVM Switches offer a spacesaving, streamlined approach to KVM switching technology by integrating an LCD panel, full keyboard, and touchpad into a 1U rack-mountable sliding housing. The LCD display is built into the cover and keyboard and touchpad are built into the base. Slide the KVM module out, flip the cover up, and you're ready to take control. When you have finished, simply flip the cover down and slide the KVM module away.

Comparison

Model	LCD KVM Switch				LCD Console
	KL9108/ KL9116	KL1508/ KL1516	KL3116T	KL3116	KL1100
Ports	8/16			16	1
Port Selection	OSD, Hotkey, Pushbutton				
Expansion	64/128 Cascade ¹	256/512 Daisy-chain	512 Daisy-chain		
Computer	Connector	SPHD	RJ-45		SPHD
	System	PS/2, USB ² , Sun ³ , Serial ⁴	PS/2, USB, Sun, Serial		PS/2, USB, Sun ³ , Serial ⁴
External Console	PS/2; HDB-15		SPHD (PS/2, USB; HDB-15)	SPHD (USB; HDB-15)	PS/2, USB; HDB-15
Extra Mouse Port	PS/2		USB	PS/2	USB
Keyboard/Mouse Emulation	PS/2	PS/2, USB	PS/2, USB		PS/2, USB
LCD	17"	17" / 19"	17"		17" / 19"
Dual Rail	•				•
Video	1280x1024@75Hz, DDC2B (Local) 1600x1200@60Hz, (Remote)	1280x1024@75Hz, DDC2B	1280x1024@75Hz, DDC2B		1280x1024@75Hz, DDC2B
Dedicated Invocation Keys	•				
Console Lock	•				
Pushbuttons	Port	•			
	Station	•			
Auto Scan	•				
Broadcast Support	•				
Multi-level Password Security	•				
Firmware Upgradeable	•				
USB Peripheral Port	•				
KVM Over the NET™	•			•	
Touchscreen	•				
Single Person Installation	•				

Notes:

- Compatible KVM Switches: CS9134, CS9138, CS88A. Some KVM Over the NET™ features may not be supported, depending on the functionality of the cascaded KVM switch.
 - Custom KVM cables are available to allow PS/2, USB systems to exist on the same installation.
 - Sun to PS/2 converters are available to allow Sun systems to exist on the same installation.
 - Requires KA9140 Serial Adapter Module.
- Depends on KVM Adapter Cable type.

All-in-One Dual Rail Design

ALTUSEN KL series of enterprise class LCD KVM Switches/LCD Consoles offer a space-saving, streamlined approach to KVM switching technology by integrating an independently retractable LCD monitor, keyboard, and built-in touchpad in a Dual Rail housing. The Dual Rail housing is less than 1U high for easy installation and manipulation in 1U of rack space. To maximize space in your data center, the keyboard “hides away” when not in use, while the thin profile LCD monitor reclines against the rack to enable continuous monitoring of computers.

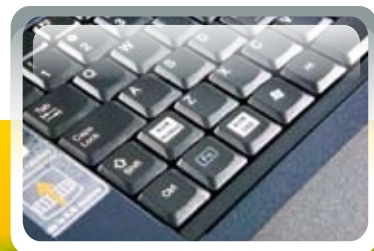
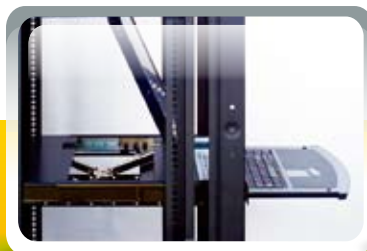
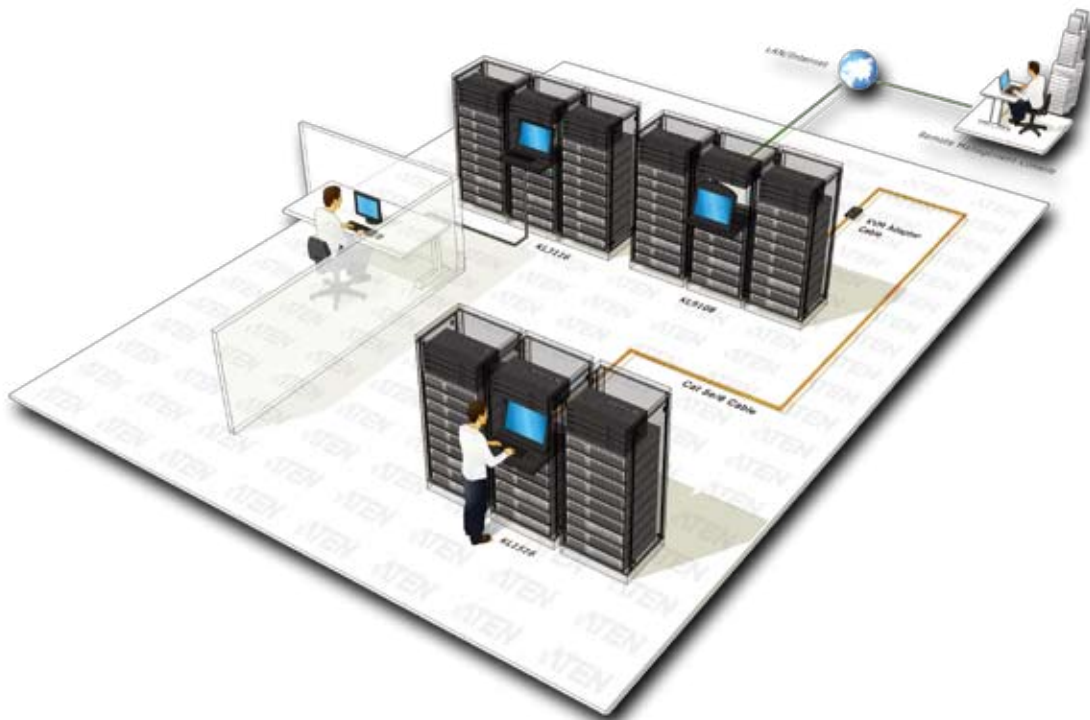
Adjustable LCD Positioning

Ergonomic design allows the LCD module to rotate for a more comfortable viewing angle. ALTUSEN LCD KVM Switches/LCD Consoles rotate up to 120° for optimum comfort.

Second Console Port for Shared Access

LCD KVM Switches/LCD Consoles provide second console ports for connecting an extra KVM console. The second console can be added easily via the rear port, enabling two users to independently manage the computers on the KVM installation. The second console enables a user to control the KVM switch and servers from an external console. Or, connect a KVM extender or CN8000 KVM on the NET™* to the second console port to provide remote access to the LCD KVM Switch/LCD Console and the attached servers.

* The CN8000 from ATEN is an ultra-compact, Over IP solution for remote access to computers and KVM installations. Please see ATEN catalog or www.aten.com for more details.



Dual Rail

Dedicated Invocation Keys

Extra Mouse Port

LCD KVM Switches/LCD Consoles have the added convenience of a mouse port for customers who want to use an external mouse instead of the touchpad.

Port Selection via Pushbutton, OSD, Hotkeys

The LCD KVM Switches provide three port selection methods to access computers on the installation including Hotkey, OSD and manual. Many models also have conveniently located station and port selectors with 7-segment LED displays to quickly switch to target computers.

Dedicated Invocation Keys

Dedicated Invocation Keys allow you to conveniently invoke Hotkey and OSD modes. They reduce the number of keystrokes necessary to access important features.

Auto Scan / Broadcast Support

ALTUSEN LCD KVM Switches feature auto scan functionality to scan and monitor the status of all connected computers. The scan interval can be set from 1–255 seconds at the administrator's convenience. In addition, many models feature time-saving broadcast functionality that allows your commands from the keyboard to be broadcast to all available computers on the installation.

Console Lock

The semi-automatic lock/unlock design enables the keyboard module to remain securely locked away in position when sliding the LCD out. When finished, just flip the cover down and unlock the release catch, then slide the module away. This function makes control and operation more safe, secure and convenient.

Icon Indicators

Each LCD KVM Switch has helpful labels and intuitive, color-coded icons which help users to operate the device more easily.

* Not all products support these features. Please see the comparison table for difference.



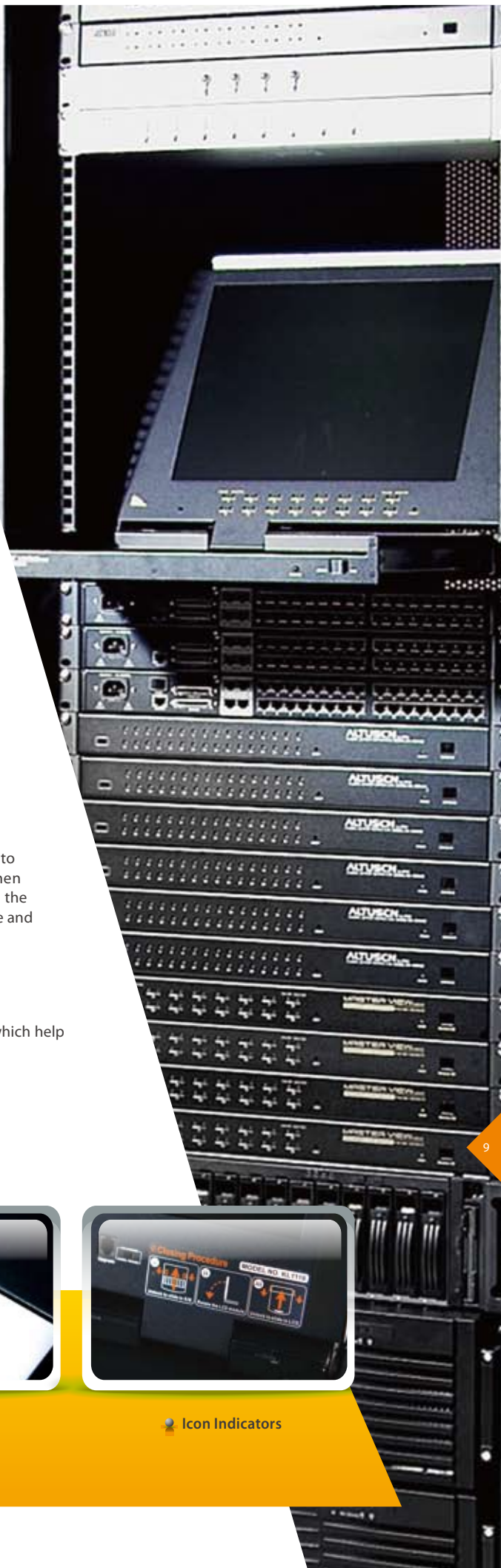
Second Console Port



Extra Mouse Port



Icon Indicators



Single Person Easy Installation (Optional)

ALTUSEN LCD KVM Switches/LCD Consoles 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 LCD KVM Switch. In just a matter of minutes, your new LCD KVM Switch/LCD Console can go from the box to the rack.

Rack Mount Kits

For convenience and flexibility, four rack mount kits are available:

	Bracket Type	Depth (cm)
KL1100, KL3116T, KL3116, KL9108/KL9116 KL1508/KL1516	Standard Installation – Short (Standard)	42.0—77.0
KL1100, KL3116T, KL3116, KL9108/KL9116 KL1508/KL1516 (17" LCD)	Standard Installation – Long (2X-010G)	68.0—105.0
	Easy Installation – Short (2X-011G)	57.0—70.0
	Easy Installation – Long (2X-012G)	68.0—105.0
KL1508 / KL1516 (19" LCD)	Standard Installation – Long (2X-010G)	68.0—105.0
	Easy Installation – Short (2X-011G)	63.0—70.0
	Easy Installation – Long (2X-012G)	74.0—105.0

Standard Installation Rack Mount Kit



Short (Standard)



Long (Optional)

Easy Installation Rack Mount Kit



Short (Optional)



Long (Optional)

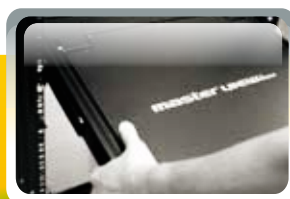
Single Person Installation

The following illustrations demonstrate just how easy it is to install your Dual Rail LCD KVM Switch with the Easy Installation Rack Mount Kit.

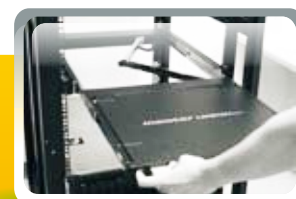
1. Secure the side rails to the rack.



2. Slide the Dual Rail LCD KVM Switch onto the rails and secure it to the rack.



3. Open the Dual Rail LCD KVM Switch. Now you are ready to begin installing the servers.



KL1100

Dual Rail LCD PS/2-USB Console



Features

- Integrated KVM console with 17" or 19" LCD monitor in a Dual Rail housing
- Dual Rail housing is slightly less than 1U with top and bottom clearance for smooth operation in 1U of rack space
- Dual Interface – supports PS/2 and USB keyboards and mice in the computer ports
- Extra console port – manage computers in the LCD KVM switch from an external console (monitor, PS/2 or USB keyboard, and PS/2 or USB mouse)
- Additional hot-pluggable USB mouse port on front panel
- Dual Rail – LCD monitor slides independently of the keyboard / touchpad
- LCD module rotates up to 120 degrees for a more comfortable viewing angle
- Console lock – enables the console drawer to remain securely locked away in position when not in use
- LCD power button helps save energy and prolong display's life
- Superior video quality – supports resolutions of up to 1280 x 1024 @75Hz, DDC2B (17" and 19" LCD)
- DDC emulation – video settings of each computer are automatically adjusted for optimal output to the monitor
- Compatible with all ATEN KVM switches and most KVM switches in the market
- Firmware upgradeable

* Please refer to www.aten.com for more details.

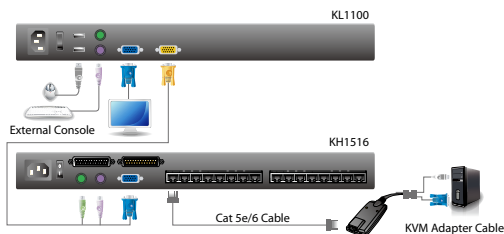


- Super A-Grade TFT LCD Panel
- Zero Dead Pixel Guarantee



17" or 19" LCD Option

Setup



Optional Equipment/Software

- **Rack Mount Kits** (Page 10)
- **PS/2 KVM Cables**
2L-5201P (1.2m); 2L-5202P/2L-5202P (1.8m); 2L-5203P (3m); 2L-5206P (6m)
- **USB KVM Cables**
2L-5201U (1.2m); 2L-5202U (1.8m); 2L-5203U (3m); 2L-5205U (5m)

Accessories



1. PS/2 KVM Cable x 1
2. Firmware Upgrade Cable x 1
3. Power Cord x 1 (AC power models only)
4. Standard Rack Mount Kit x 1



KL9108/KL9116

Dual Rail LCD KVM Switch LCD Console+KVM Switch with KVM over IP



Features



- Super A-Grade TFT LCD Panel
- Zero Dead Pixel Guarantee*



Over IP Functionality



Graphical OSD

KL9108

- 8 ports
- 1 local 1 remote user access

KL9116

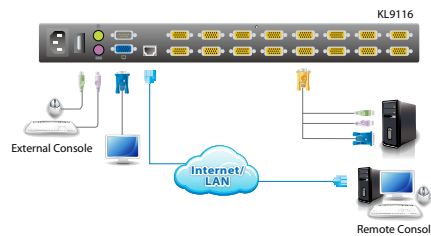
- 16 ports
- 1 local 1 remote user access

- Integrated KVM console with 17" LCD monitor in a Dual Rail housing
- Space-saving technology with dual bus function support – 1 remote console (one bus) and two local consoles (one bus) control up to 8 or 16 computers
- Dual-bus – one local and one remote user can simultaneously control separate ports
- Remotely access computers via the LAN, WAN, or Internet – control your installation when and where you want
- Dual Rail housing is slightly less than 1U with top and bottom clearance for smooth operation in 1U of rack space
- Extra console port – manage computers in the LCD KVM switch from an external console (monitor, PS/2 keyboard, and PS/2 mouse)
- Supports external PS/2 mouse
- Dual Rail – LCD monitor slides independently of the keyboard/touchpad
- LCD module rotates up to 120 degrees for a more comfortable viewing angle
- Console lock – enables the console drawer to remain securely locked away in position when not in use
- Supports dedicated OSD and OSD Toolbar invocation keys
- Internet browser access, Windows Client and Java Client provided, Java Client works with all operating systems
- Graphical OSD and graphical toolbars for convenient, user-friendly operation
- Up to 64 user accounts – up to 32 concurrent remote logins
- Panel Array Mode – view all 8 or 16 ports at the same time
- Message board feature allows logged in users to communicate with each other and allows a remote user to take exclusive control of the KVM functions
- Windows-based Log Server
- Remote power control for attached Power Over the NET™ devices
- Cascadable – provides up to 64/128 computers**
- Three-level login security – Administrator, User, and Select
- LCD power button helps save energy and prolong display's life
- Advanced security features include password protection and advanced encryption technologies – 1024-bit RSA, 256-bit AES, 56-bit DES, and 128-bit SSL
- RADIUS server support
- Ports can be set to Exclusive, Occupy and Share
- Network Interfaces: TCP/IP, HTTP, HTTPS, UDP, RADIUS, DHCP, SSL, ARP, DNS, 10Base-T/100Base-TX, auto sense, Ping
- Flash firmware upgradable over network connection

* Please refer to www.aten.com for more details.

** Compatible KVM Switches: CS9134, CS9138, CS88A. Some KVM Over the NET™ features may not be supported, depending on the functionality of the cascaded KVM switch.

Setup



Optional Equipment/Software

- **Rack Mount Kits** (Page 10)
- **PS/2 KVM Cables**
2L-5201P (1.2m); 2L-5202P/2L-5702P (1.8m); 2L-5203P (3m); 2L-5206P (6m)
- **Cables for USB interface support**
2L-5202UP (1.8m); 2L-5203UP (3m); 2L-5205UP (5m); 2L-5206UP (6m)
- **Converters for Sun interface support** (Page 53)
Sun (USB) compatible: CV131A; Sun (Legacy) compatible: CV130A

Accessories



1. PS/2 KVM Cables x 2
2. Power Cord x 1
3. Standard Rack Mount Kit x 1

KL1508/KL1516

Cat 5 High-Density Dual Rail LCD KVM Switch



Features

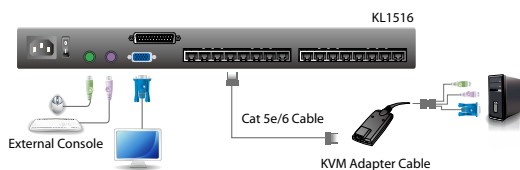
- Integrated KVM console with 17" or 19" LCD monitor in a Dual Rail housing
- A single console controls up to 8 (KL1508) or 16 (KL1516) computers
- KVM adapter cables** designed with automatic conversion to allow flexible interface combinations (PS/2, USB, Sun and serial) to control all computer types
- Multiplatform support – PC, Mac, Sun and serial
- Extends the distance between computers and switch – up to 40 m (130') for resolutions of 1280 x 1024 @ 75Hz
- OSD tree structure makes finding and managing computers easy
- Conveniently located station and port selectors with LED displays to quickly switch to target computers
- Dual Rail housing is slightly less than 1U with top and bottom clearance for smooth operation in 1U of rack space
- Extra console port – manage computers in the LCD KVM switch from an external console (monitor, PS/2 keyboard, and PS/2 mouse)
- Supports external PS/2 mouse
- Dual Rail – LCD monitor slides independently of the keyboard / touchpad
- LCD module rotates up to 120 degrees for a more comfortable viewing angle
- Console lock – enables the console drawer to remain securely locked away in position when not in use
- Dedicated Hotkey Mode and OSD Invocation Keys reduce the number of keystrokes and provide quick access to these functions
- Daisy-chain up to 31 additional KVM switches to control up to 512 computers***
- Auto Scan Mode enables continuous monitoring of user-selected computers
- Two-level password security – Administrator and up for four Users; only authorized users view and control the computers; separate profiles for each
- LCD power button helps save energy and prolong display's life
- PS/2, USB, and Serial keyboard and mouse emulation – computers boot even when the console focus is elsewhere
- Firmware upgradable

* Please refer to www.ATEN.com for more details.

** Please see page 54 for more details.

*** Compatible KVM switches: KH1508, KH1516, KH0116, CS1708A, CS1716A, ACS1208A, ACS1216A.

Setup



Optional Equipment/Software

- **Rack Mount Kits** (Page 10)
- **Daisy Chain Cables**
2L-1700 (0.6m); 2L-1701 (1.8m); 2L-1703 (3m); 2L-1705 (5m); 2L-1715 (15m)
- **KVM Adapter Cables:**

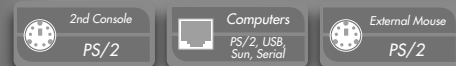
Model	Function
KA9520	PS/2 KVM Adapter Cable
KA9570	USB KVM Adapter Cable
KA9130	Sun Legacy KVM Adapter Cable
KA9170	USB KVM Adapter Cable (PC/Mac/Sun)
KA9140	Serial KVM Adapter Module

* See Page 54 for KVM Adapter Cable Details

Accessories



1. Firmware Upgrade Cable x 1
2. Power Cord x 1
3. Standard Rack Mount Kit x 1



- Super A-Grade TFT LCD Panel
- Zero Dead Pixel Guarantee



Distance Extension



17" or 19" LCD Option

KL1508
• 8 ports

KL1516
• 16 ports



KL3116T

16-Port Dual Rail Touch Screen KVM Switch



Features



- Super A-Grade TFT LCD Panel
- Zero Dead Pixel Guarantee*



Touchscreen Enabled
– No Driver Required



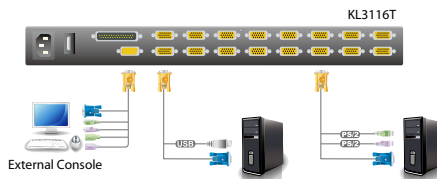
USB Peripheral Support

- Integrated KVM console with 17" LCD monitor in Dual Rail housing
- Space saving technology – up to two consoles (sharing one bus) can control up to 16 computers
- Touchscreen offers convenient operation without extending the keyboard module or using a mouse
- Simple one-point and two-point touchscreen calibration including separate methods for calibrating the OSD (on-screen display) and attached computers with varying resolutions
- Dual Interface – supports computers and KVM switches with PS/2 or USB keyboards and mice
- Supports USB peripherals for computers connected to the local station
- OSD tree structure makes finding and managing computers easy
- Conveniently located station and port selectors with LED displays to quickly switch to target computers
- Dual Rail housing is slightly less than 1 U with top and bottom clearance for smooth operation in 1U of rack space
- Extra console port – manage computers from the LCD KVM switch from an external console (monitor, USB or PS/2 keyboard and mouse)
- Supports external USB mouse
- Dual Rail – LCD monitor module slides independently of the keyboard / touchpad module
- LCD module rotates up to 120 degrees for a more comfortable viewing angle
- Console lock – enables the console drawer to remain securely locked away in position when not in use
- Dedicated Hotkey mode and OSD invocation keys reduce the number of keystrokes and provide quick access to these functions
- Daisy-chain up to 31 additional KVM switches** to control up to 512 computers
- Convenient computer selection via mouse-driven, intuitive OSD menus and hotkeys
- Hot pluggable – add or remove computers without powering down the switch
- OSD port list automatically expands when new stations are added
- Auto Scan mode enables continuous monitoring of user-selected computers
- Broadcast support – commands from the keyboard can be broadcast to all available computers on the installation
- Two level password security – Administrator and up to four Users; only authorized users view and control the computers; separate profiles for each
- LCD power button helps save energy and prolong display's life
- DDC emulation – video settings of each computer are automatically adjusted for optimal output to the monitor
- Firmware upgradeable

* Please refer to www.ATEN.com for more details.

** Compatible KVM switches: KH1508, KH1516, KH0116, CS1708A, CS1716A, ACS1208A, ACS1216A.

Setup



Optional Equipment/Software

- **Rack Mount Kits** (Page 10)
- **Daisy Chain Cables**
2L-1700 (0.6m); 2L-1701 (1.8m);
2L-1703 (3m); 2L-1705 (5m); 2L-1715 (15m)
- **PS/2 KVM Cables**
2L-5201P (1.2m); 2L-5202P/2L-5702P (1.8m);
2L-5203P (3m); 2L-5206P (6m)
- **USB KVM Cables**
2L-5201U (1.2m); 2L-5202U (1.8m);
2L-5203U (3m); 2L-5205U (5m)

Accessories



1. PS/2 KVM Cable x 1
2. USB KVM Cable x 1
3. Console Cable x 1
4. Firmware Upgrade Cable x 1
5. Power Cord x 1

6. Standard Rack Mount Kit x 1
7. Grounding Wire x 1

KL3116

16-Port Dual Rail LCD KVM Switch



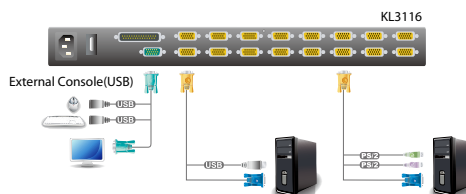
Features

- Integrated KVM console with 17" LCD monitor in a Dual Rail housing
- Space-saving technology – up to two consoles (one bus) control up to 16 computers
- Dual Interface – Supports computers and KVM switches with PS/2 or USB keyboards and mice
- Supports USB peripherals for computers connected to the local station
- OSD tree structure makes finding and managing computers easy
- Conveniently located station and port selectors with LED displays to quickly switch to target computers
- Dual Rail housing is slightly less than 1U with top and bottom clearance for smooth operation in 1U of rack space
- Extra console port – manage computers in the LCD KVM switch from an external console (monitor, USB keyboard, and USB mouse)
- Supports external PS/2 mouse
- Dual Rail – LCD monitor slides independently of the keyboard/ touchpad
- LCD module rotates up to 120 degrees for a more comfortable viewing angle
- Console lock – enables the console drawer to remain securely locked away in position when not in use
- Dedicated Hotkey Mode and OSD Invocation Keys reduce the number of keystrokes and provide quick access to these functions
- Daisy-chain up to 31 additional KVM switches** to control up to 512 computers
- Auto Scan Mode enables continuous monitoring of user-selected computers
- Broadcast support – commands from the keyboard can be broadcast to all available computers on the installation
- Two-level password security – Administrator and up to four Users; only authorized users view and control the computers; separate profiles for each
- LCD power button helps save energy and prolong display's life
- DDC emulation – video settings of each computer are automatically adjusted for optimal output to the monitor
- Firmware upgradable

* Please refer to www.ATEN.com for more details.

** Compatible KVM switches: KH1508, KH1516, KH0116, CS1708A, CS1716A, ACS1208A, ACS1216A.

Setup



Optional Equipment/Software

- **Rack Mount Kits** (Page 10)
- **Daisy Chain Cables**
2L-1700 (0.6m); 2L-1701 (1.8m);
2L-1703 (3m); 2L-1705 (5m); 2L-1715 (15m)
- **PS/2 KVM Cables**
2L-5201P (1.2m); 2L-5202P/2L-5702P (1.8m);
2L-5203P (3m); 2L-5206P (6m)
- **USB KVM Cables**
2L-5201U (1.2m); 2L-5202U (1.8m);
2L-5203U (3m); 2L-5205U (5m)

Accessories



1. USB KVM Cables x 2
2. Firmware Upgrade Cable x 1
3. Console Cable x 1
4. Power Cord x 1
5. Standard Rack Mount Kit x 1
6. Grounding Wire x 1



- Super A-Grade TFT LCD Panel
- Zero Dead Pixel Guarantee*



USB Peripheral Support



Station and Port Selection Switches



Dual Interface – supports computers with PS/2 or USB keyboards and mice



Custom SPHD connector for extra USB Console



LCD KVM Switches Specifications

Function		KL1100	KL9108	KL9116	
Computer Connections	Direct	1	8	16	
	Max.	N/A	64 (Cascade)	128 (Cascade)	
Console Connections	Local	1	1		
	Remote	N/A	1		
Port Selection		N/A			
Connectors	Console Ports	Keyboard	1 x PS/2 (F); 1 x USB (F)	1 x PS/2 (F)	
		Video	1 x HDB-15 (F)	1 x HDB-15 (F)	
		Mouse	1 x PS/2 (F); 1 x USB (F)	1 x PS/2 (F)	
	KVM Port		1 x SPHD (F)	8 x SPHD (F)	16 x SPHD (F)
	Power		1 x 3-prong AC socket		
	F/W Upgrade		1 x RJ-11	N/A	
	External Mouse		1 x USB (F)	1 x PS/2 (F)	
	LAN		N/A	1 x RJ-45	
	PON		N/A	1 x DB-9 (M)	
Emulation	Keyboard/Mouse	PS/2; USB	PS/2		
Video		1280 x 1024, DDC2B	1280 x 1024 @ 75 Hz; DDC2B (Local); 1600 x 1200 @ 60 Hz; DDC2B (Remote)		
I/P Rating		100–240V AC, 50/60 Hz, 1A			
Power Consumption		120V/29.6W, 230V/29.6W (17"); 120V/32.2W, 230V/32.2W (19")	120V/31W; 230V/39W		
Environment	Operating Temp.	0–40°C (17"); 0–50°C (19")		0–40°C	
	Storage Temp.	-20–60°C			
	Humidity	0–80% RH, Non-condensing			
Physical Properties	Housing	Metal			
	Weight	15.90 kg (17"); 17.40 kg (19")	17.10 kg	17.30 kg	
	Dimensions (L x W x H)	61.40 x 48.20 x 4.40 cm(19"/1U) (17"); 66.50 x 48.20 x 4.40 cm(19"/1U) (19")	70.50 x 48.20 x 4.40 cm (19"/1U)		

Function		KL1508/ KL1516	KL3116T	KL3116	
Computer Connections	Direct	8/16	16	16	
	Max	256/512 (Daisy-chain)	512 (Daisy-chain)	512 (Daisy-chain)	
Port Selection		OSD, Hotkey, Pushbutton			
Connectors	External Console Ports	Keyboard	1 x PS/2 (F)	1 x SPHD (M)	
		Video	1 x HDB-15 (F)		
		Mouse	1 x PS/2 (F)		
	KVM Ports		8/16 x RJ-45	16 x SPHD (F)	16 x SPHD (F)
	Daisy-chain		1 x DB-25 (M)		
	F/W Upgrade		1 x RJ-11		
	Power		1 x 3-prong AC socket		
	USB Hub		N/A	1 x USB (F)	1 x USB (F)
External Mouse		1 x PS/2 (F)	1 x USB (F)	1 x PS/2 (F)	
Emulation	Keyboard / Mouse	PS/2, USB			
Video		1280 x 1024 @ 75 Hz; DDC2B			
I/P Rating		100–240V AC; 50/60Hz; 1A			
Power Consumption		120V / 28W, 230V / 28W (17"); 120V / 30W, 230V / 30W (19")	120V / 27.5W; 230V / 28W	120V / 35.2W; 230V / 41.8W	
Environment	Operating Temp.	0–40°C (17"); 0–50°C (19")		0–40°C	
	Storage Temp.	-20–60°C			
	Humidity	0–80% RH; Non-condensing			
Physical Properties	Housing	Metal		Metal	
	Weight	17.30 kg (17"); 18.50 kg (19")	21.00 kg	17.50 kg	
	Dimensions (L x W x H)	70.90 x 48.20 x 4.40 cm (19"/1U) (17"); 76.00 x 48.20 x 4.40 cm (19"/1U) (19")	68.40 x 48.20 x 4.40 cm (19"/1U)	70.50 x 48.20 x 4.40 cm (19" / 1U)	

Product specifications and appearance are subject to change without notice.