

K63 Key Benefits

- Preconfigured Enterprise-Class VLAN “out-of-the box” solution at a fraction of the cost
- Color-Coded ports for A/V devices, controls, and computers for simple, fast installations
- Integrated Pakedge Quality of Service (QoS) to ensure jitter-free audio/video streaming
- Stackable with additional Pakedge switches for the largest of systems
- Predefined Basic and Advanced Settings with Pakedge Support. Additional unlimited customizations available with support offered by Fortinet and/or Pakedge Custom
- A/V Rack-Mountable: clean face; fanless; cables in the back
- Dual WAN ports for redundant Internet connections deliver higher availability and will switch over to the other connection when the first one fails
- Multiple VPN Tunnels
- Dedicated DMZ Port
- Secure Guest Network
- Express Card Slot for Optional 3G/4G Broadband Card
- 24-Port Managed Gigabit Switch with Configurable VLAN Port Association

Additional K63U Key Benefits

- Web filtering allows parents to monitor and control their children’s web activity.
- The router identifies hundreds of thousands of viruses through a database that is automatically updated each time a new virus is discovered.
- The router limits access to websites based on designated categories. More than 60 million websites and two billion web pages are rated by category. URL filtering can block your network users from access to URLs that you specify.
- Application control can detect the network traffic of more than 1,000 applications, improving your control over application communication. When you use this feature within a network, you are able to control your various appliances. For example, you can program your Xbox 360 to automatically shut off at a certain time.

K63

PRECONFIGURED, MULTI-VLAN, GIGABIT ROUTER AND 24-PORT CONFIGURABLE AUDIO/VIDEO BRIDGING SYSTEM WITH PoE

K63U

PRECONFIGURED, MULTI-VLAN, GIGABIT ROUTER AND 24-PORT CONFIGURABLE AUDIO/VIDEO BRIDGING SYSTEM WITH PoE; PRELOADED WITH UNIFIED THREAT MANAGEMENT (UTM)



The popularity and affordability of IP networking has driven audio/video and controls networks to share the same physical wire with computer networks. Unlike computer data, however, video streaming, audio streaming, and control systems cannot tolerate unpredictable latency. These sophisticated networks require the same robustness as an enterprise network to ensure the packets that carry audio and video arrive in time and IP-based controls do not lose critical command packets.

The Pakedge Audio-Video Bridging (AVB) product line solves these issues with minimal required configuration. The Pakedge AVB products have preconfigured security appliances (routers) and switches, effectively dividing the network into six separate subnets (VLANs) to manage traffic, broadcasting, and priority for all devices, based on color-coded ports. The simplicity of the Pakedge solution enables custom A/V installers to complete quick, quality installations, while avoiding the complexity of an enterprise-level configuration.

The Pakedge K63 and K63U KITs now come with a hybrid Gigabit switch that has both regular Ethernet ports and ports with PoE, Power-over-Ethernet. The K63 and K63U are both preconfigured and ready to accept all types of Ethernet devices, even those that require PoE, such as Wireless Access Points, IP Cameras, and in-wall touch panels.

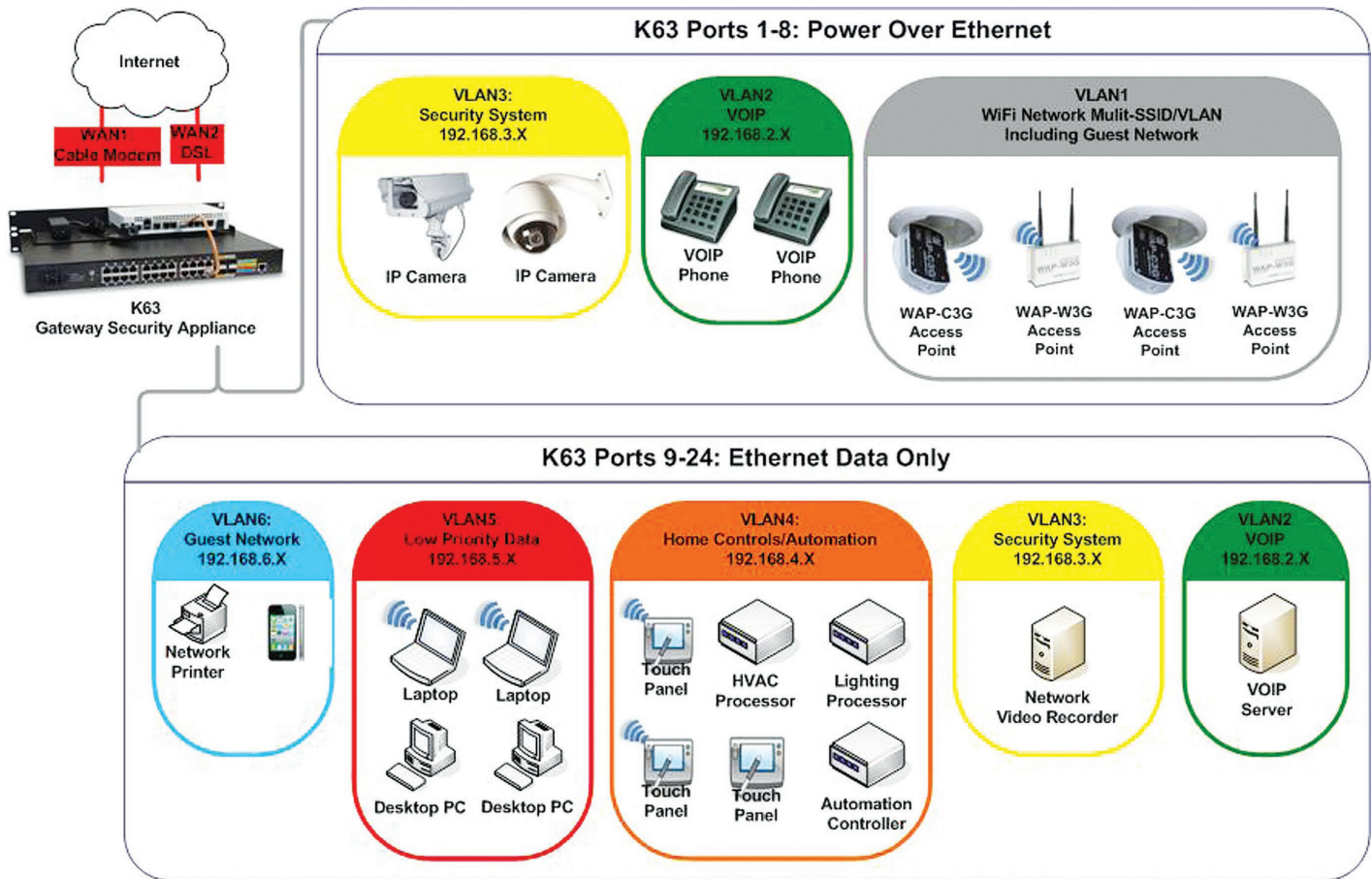
The K63U is additionally preloaded with Unified Threat Management (UTM). The UTM router is a complete Parental Controls and Network Security appliance that can block access to unauthorized websites and stop virus infections before they reach computers and appliances on the network.

HTTP://
WWW.
PAKEDGE
.COM

1163 Triton Drive
Foster City, CA 94404
Main: 877.274.6100
Fax: 650.685.5520
sales@pakedge.com

pakedgedevice&software inc.

K63 and K63U Suggested Network Configuration



R6V – Audio-Video Bridging Router

- > Preconfigured to separate network into 4 distinct subnets (VLANs) to prevent broadcast issues between sub-systems such as VOIP phones, video streaming, home automation controls, and computer data
- > Support 100Mbps WAN throughput speed
- > Robust, reliable, high-performance, versatile, enterprise-grade security appliance based on Application Specific Integrated Circuit (ASIC) design
- > Dedicated DMZ Port
- > 5 Internal Switch Ports
- > Unrestricted Number of Users
- > Multiple VPN Tunnels

S24P8 – 8 Ports Gigabit PoE and 16 Ports Gigabit Hybrid Switch

- > 24 Gigabit ports with 8 ports full 15.4 Watts PoE
- > 4 fiber-capable ports
- > Remote power-cycling per port for rebooting unresponsive devices
- > Full remote management through web browser, console serial cable (CLI), or Telnet
- > Heavy-duty metal 1U housing with rack mount hardware included
- > Clean front face with cables in the back
- > Quiet operation
- > 802.1q: supports VLAN tagging
- > 802.1p: supports Quality of Service
- > Auto-detect powered devices and power consumption levels

BR6 – Router Rack Mount Bracket

- > Simple Installation: all mounting hardware included
- > Fits the Router and Power Supply for the R6V
- > Fits Standard 19" 1U AV Rack
- > Clean Front Face with cables that Exit the Back

R6V SPECIFICATIONS

INTERFACES

Total Network Interfaces:	8
10/100/1000 Internal Switch Interfaces (Copper, RJ-45):	5
10/100 WAN Interfaces (Copper, RJ-45):	2
10/100 DMZ Interfaces (Copper, RJ-45):	1
USB Interfaces:	2 (1 Type-A, 1 Type-B)
Express Card Slot	1
Internal Storage	8 GB
SDHC Card Slot (4GB to 32GB Class 6 or higher)	1 (4GB card installed)

SYSTEM PERFORMANCE

Firewall Throughput (1518 byte UDP packets)	1 Gbps
Firewall Throughput (512 byte UDP packets)	1 Gbps
Firewall Throughput (64 byte UDP packets)	1 Gbps
IPSec VPN Throughput	70 Mbps
SSL VPN Throughput	15 Mbps
IPS Throughput (512 byte UDP packets)	60 Mbps
IPS Throughput (HTTP)	50 Mbps
Antivirus Throughput* (Proxy)	20 Mbps
Gateway-to-Gateway IPSec VPN Tunnels (System/VDOM)	500 / 50
Client-to-Gateway IPSec VPN Tunnels	800
Max Concurrent Firewall Sessions	80,000
Firewall Sessions/Sec	3,000
Max Concurrent SSL-VPN Users	550
Firewall Policies (System / VDOM)	5,000 / 500
Virtual Domains (Max / Default)	10 / 10

DIMENSIONS

Height x Width x Length	1.44 x 8.50 x 5.81 in. (3.66 x 21.59 x 14.76 cm)
Weight	1.9 lb (0.86 kg)
1U Rack-Mountable	Yes

ENVIRONMENT

Power Required	100-240 VAC, 50-60 Hz, 1.5 Amp Max
Power Consumption (AVG)	15.7 W
Heat Dissipation	53.6 BTU/h
Operating Temperature	32 - 104 deg F (0 - 40 deg C)
Storage Temperature	-13 - 158 deg F (-25 - 70 deg C)
Humidity	5 to 90% non-condensing

Package Contents:

- **R6V** – Audio-Video Bridging Router
- **S24P8** – 24 Port Hybrid Switch- 8 Ports Gigabit PoE and 16 Ports Gigabit
- **VLAN Overlay Labels** – Overlay labels to reconfigure VLAN Ports
- **BR6** – Rack Mount Bracket
- **Power Supply AC/DC** (for R6V)
- **2 x Power Cables** (US, EUR, UK, AUS/ NZ, IT or IN/SA)
- **Console Serial Cable** (used for advanced features supported by Fortinet)
- **Gray CAT5E Cable** (Switch port 1 to Router Ports 1, 2 or 3)
- **Red CAT5E Cable** (WAN 1 Port to Internet Connection)
- **Installation Manual** (used for advanced features supported by Fortinet)

S24P8 SPECIFICATIONS

SUMMARY

Fixed port	20 10/100/1000Base-TX ports. 4 Combo ports (10/100/1000Base-T or 1000Base-X) 1 Console port
LED Indicators	PWR, PoE, 1000M and Link/Act LED.
Input voltage	100V~240V AC~50/60Hz
Power consumption	150W (123W for PoE)
Operating temperature	0°C-40°C
Storage temperature	-10°C-70°C
Relative humidity	20%-85% (non-condensing)
Thermal methods	Built-in Noiseless FAN

PoE

PoE port	8 10/100/1000Base-TX ports Ports Number 1 to 8
PoE Standard	IEEE802.3af, per port 15.4W
Pin assignment	V+ (RJ45 Pin 1, 2) V- (RJ45 Pin 3, 6)
PoE management	Support Port-base PoE status view and control

Layer 2 Switching

Switching capacity	64G
MAC address table	8K, Support MAC address table management
MAC Address Binding	Support
MAC Address Filtering	Support
MAC Address Learning control	Control number of port-based MAC address learning
Jumbo Frame	Jumbo packets up to 16379 bytes
Port Feature	Port Control Port Isolation Port Self-loop Detection
Port Mirroring	Support
VLAN	4K 802.1q VLANs, Support Ingress filter
Link Aggregation	Up to 8 maximum aggregation groups, each containing up to 8 GE ports
Traffic control	IEEE 802.3x full-duplex flow control
Rate Limit	Unit: 64kbps
Spanning Tree	IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
Ring Protocol	Support EAPS
Multicast	Support 256 Multicast groups Support IGMP Snooping

Layer 3 Switching

Static ARP	Support
Static Routing	Support
L3 VLAN interface	Up to 32 L3 VLAN Interface

Convergence

QoS	4 output queues on each port Support flexible queue scheduling algorithms: WRR, Q+WRR Support port-based / MAC-based / 802.1p / DSCP classification
-----	---

Security

Security Features	Support MAC-based 802.1X authentication Support AAA/RADIUS authentication Support WEB/Telnet password protection Support Accessing privilege mode password protection
Self-protection	Support CPU Self-protection

Management

CLI	Support CLI (Commend Line Interface) configuration mode.
Console	Support Configuration via the console port
Telnet	Support Local/remote configuration via Telnet
WEB	Support WEB management system
SNMP	Support System configuration with SNMP v1/v2/v3.
User Management	Support Multi-user management
System Log	Support
Configuration File	Support Download/Upload configuration File via WEB/TFTP
Download/Upload	Support Upgrade Firmware via WEB/TFTP/Console

Debug

PING	Support
TRACEROUTE	Support
Telnet client	Support
Process View	Support

Mechanical

L x W x H	17.6" x 11.8" x 1.7" (447mm x 300mm x 44mm)
Weight	10.4 lbs. (4.7 kg.)

HTTP://
WWW.
PAKEDGE
.COM

1163 Triton Drive
Foster City, CA 94404
Main: 877.274.6100
Fax: 650.685.5520
sales@pakedge.com

pakedgedevice&software inc.