BLACK BOX®
NETWORK SERVICES

SERVSWITCH WIRELESS KVM EXTENDER
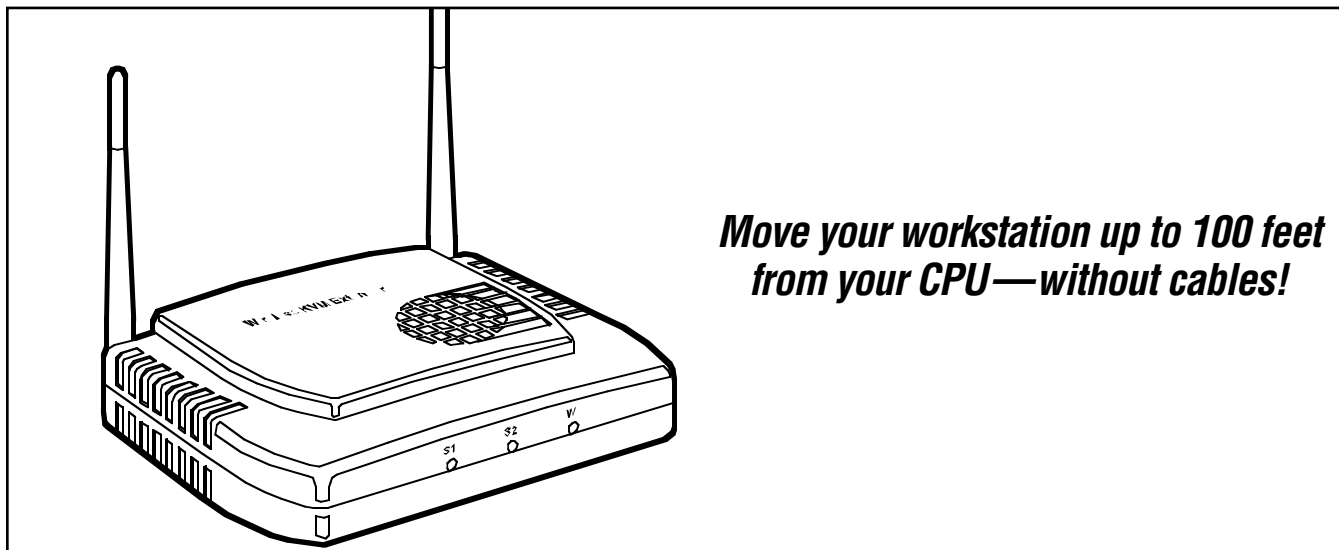
Move your workstation up to 100 feet from your CPU—without cables!

Key Features

▶ *Perfect for fast and easy network expansion as well as frequent moves.*

▶ *Range of up to 100 feet.*

▶ *State-of-the-art compression ensures video every time.*

▶ *Fast, easy installation—no software required.*

▶ *Advanced security features.*

▶ *Full audio support enables you to use speakers or headphones at the remote workstation.*

The ServSwitch™ Wireless KVM Extender enables you to connect keyboard, video, and mouse peripherals to your CPU *without* cables.

This extender saves you the expense and inconvenience of running cable. It's perfect for difficult cabling environments such as historic buildings or in situations where you frequently move servers and workstations. With an effective range of 100 feet (30.5 m), the extender has enough coverage for most buildings.

High throughput, minimum interference

The ServSwitch Wireless KVM Extender uses a proprietary transmission method based on the IEEE 802.11a standard. IEEE 802.11a supports data throughput to an upper range of 54 Mbps within the 5-GHz band called U-NII (Unlicensed National Information Infrastructure) in the United States. Because this frequency is used far less often than the more popular 2.4-GHz band, it's far less prone to interference from other wireless devices.

802.11a uses Orthogonal Frequency Division Multiplexing (OFDM) technology to achieve its high throughput. OFDM transmits high-speed digital data over a radio by splitting the radio signal into multiple, smaller sub-signals that are subsequently transmitted simultaneously at different frequencies to the receiver. Because OFDM also reduces the amount of crosstalk, you get cleaner transmission and higher throughput.

Quality video

The Wireless KVM Extender supports VGA, SVGA, and XGA video at resolutions of 640 x 480, 800 x 600, and 1024 x 768, and is compatible with most common PC video monitors (although not extra large or specialty monitors). Best performance is achieved if the colour resolution is set to 24-bit colour or higher.

For reliable video quality, the extender processes inbound and outbound analog video using a compression engine featuring a multimedia digital signal processor (DSP) and Field-Programmable Gate Array (FPGA) chip that are coupled to an IEEE 802.11a radio board.

Plug and play convenience

The ServSwitch Wireless KVM Extender is a simple hardware-only solution that requires no software. Setup is fast and easy—virtually plug and play. Just connect the receiver unit directly to your remote keyboard, monitor, and mouse and connect the transmitter to your CPU and your local keyboard, monitor, and mouse

11536

(see illustration below). And, because the remote unit also supports speakers or headphones, you get full functionality at your remote workstation.

A convenient on-screen display, accessed from the receiver side, enables you to make adjustments and fine-tune the video. This display is embedded in the extender's hardware and requires no new operating systems, drivers, or application software.

Secure

Security is based on the Advanced Encryption Standard (AES), a highly secure encryption scheme with a fixed block size of 128 bits and a key size of 128, 192, or 256 bits.

It's got what you need

The Wireless KVM Extender comes ready to set up and go. It includes a transmitter unit and receiver unit (plus power supplies for both) as well as a 3.5-foot (1-m) cable with video and PS/2 compatible keyboard and mouse connectors.

About Video Standards

IBM® PCs and compatibles come with a variety of different video displays described by cryptic sets of letters. What these letters mean is not important. What is important is that each describes a video monitor of a specific maximum size as measured in pixels:

- VGA: 640 x 480
- SVGA: 800 x 600
- XGA: 1024 x 768
- QVGA: 1280 x 960
- SXGA+: 1400 x 1050
- UXGA: 1600 x 1200
- QXGA: 2048 x 1536
- QSXGA+: 2800 x 2100

- QUXGA: 3200 x 2400
- WXGA: 1280 x 800
- SXGA: 1280 x 1024
- W-XGA : 1366 x 768
- WSXGA+: 1680 x 1050
- WUXGA: 1920 x 1200
- QSXGA: 2560 x 2048

The ServSwitch Wireless KVM Extender supports VGA, SVGA, and XGA—the most common video standards.

ServSwitch Wireless KVM Extender, Transmitter
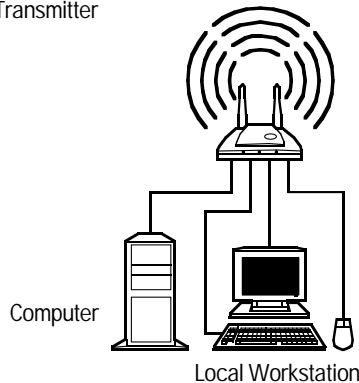
ServSwitch Wireless KVM Extender, Receiver

Remote Workstation with Speakers

Computer
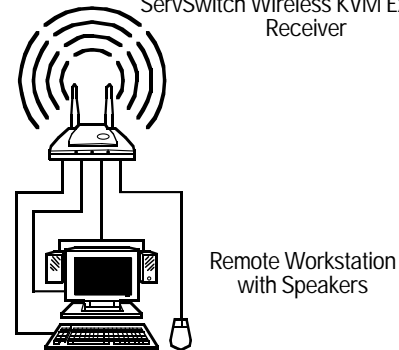
Local Workstation

The ServSwitch Wireless KVM Extender supports both a local and a remote workstation.

Specifications

Audio Support: Analog

Compatibility:
Computer: IBM PC or compatible;
Video: VGA, SVGA, XGA;
Peripherals: PS/2® keyboard and mouse, extended speakers

Compliance: FCC Class A, UL®, cUL

Security: AES encryption with 802.1x authentication

Radio:
Frequency: 5150–5350, 5725–5825 MHz;
Modulation: OFDM (Orthogonal Frequency Division Multiplexing);
Nominal Power Output: 17 dBm;
Protocol: IEEE 802.11a;
Range: XGA video resolution to 100 feet (30.5 m)

Video Resolution: 640 x 480, 800 x 600, 1024 x 768 @ 60 Hz

Connectors: Transmitter and receiver:
Video: (1) DB15 F;
Keyboard and mouse: (2) 6-pin mini DIN;
Stereo: (1) 3.5-mm mini jack

Temperature:
Operating:
32 to 104°F (0 to 40°C);
Storage:
-4 to +122°F (-20 to +50°C)

Power: External power supply:
Input: 100–240 VAC, 50/60 Hz, switching;
Output: 12 VDC

Size: 1.75"H (1U) x 6.25"W x 5.25"D (4.4 x 15.9 x 13.3 cm)

Weight: 1 lb. (0.5 kg)

Ordering Information

ITEM	CODE
ServSwitch Wireless KVM Extender	ACU5200A