



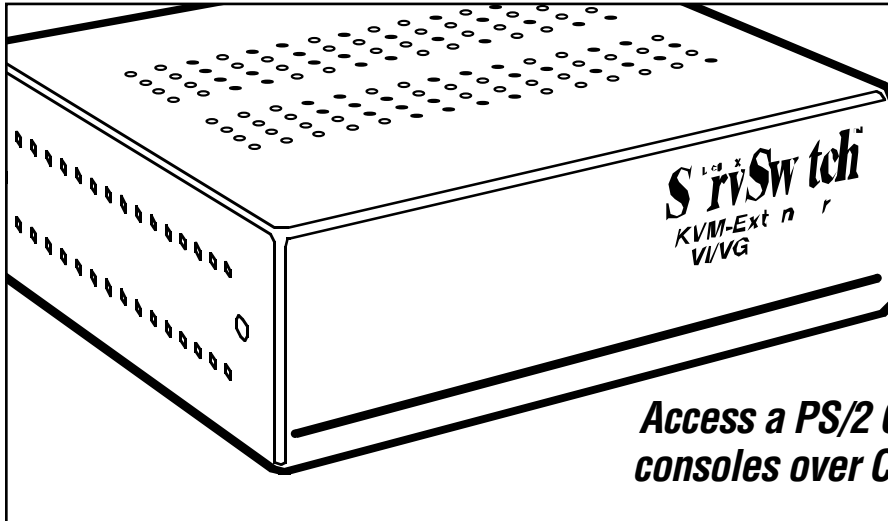
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BLACK BOX[®]

NETWORK SERVICES

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SERVSWITCH DVI/VGA PS/2 EXTENDERS



Access a PS/2 CPU via local or remote consoles over CATx or fibre optic cable.

Key Features

- ▶ **Twisted-pair version lets you select Category 5, 5e, or 6 cable.**
- ▶ **Fibreoptic versions available for duplex multimode or duplex single-mode.**
- ▶ **Access video equipment locally and remotely.**
- ▶ **Upgradable firmware.**
- ▶ **PS/2 cables and adapters are included.**
- ▶ **Each extender includes a local and a remote unit.**

Suppose you have a PS/2[®] CPU at one location, but need dual access to it (from either a local or a remote PS/2 keyboard, DVI monitor, and PS/2 mouse). The ServSwitch™ DVI/VGA PS/2 CATx (twisted-pair), Multimode (fibre), or Single-Mode (fibre) Extenders are ideal for any KVM application that demands flexible video connections and exceptional video quality. With these extenders, you get video resolution at the local console of up to 1600 x 1200 for VGA or 1280 x 1024 for DVI.

A PS/2 console is defined as a PS/2 keyboard/video/mouse combination. When the keyboard and mouse are being used at one PS/2 console, the extender blocks access at the other console until there is no keyboard or mouse

activity for a defined timeout period.

CATx twisted-pair cable is defined as either CAT5, CAT5e, or CAT6. Extend the distance from your PC up to 300 ft. (91.4 m) using CATx cable and a CATx extender.

For greater distances between consoles and the CPU, choose the fibre optic extender models. There's one for multimode and another for single-mode cable. The multimode model lets you run 62.5/125- μ m cable up to 650 ft. (198.1 m) between local and remote units, or connect 50/125- μ m cable up to 1300 ft. (396.2 m). And by using fibre cable, you get all its benefits, including immunity to electrical interference.

The single-mode version enables 9/125- μ m connections up

to 6.25 mi. (10.1 km) apart.

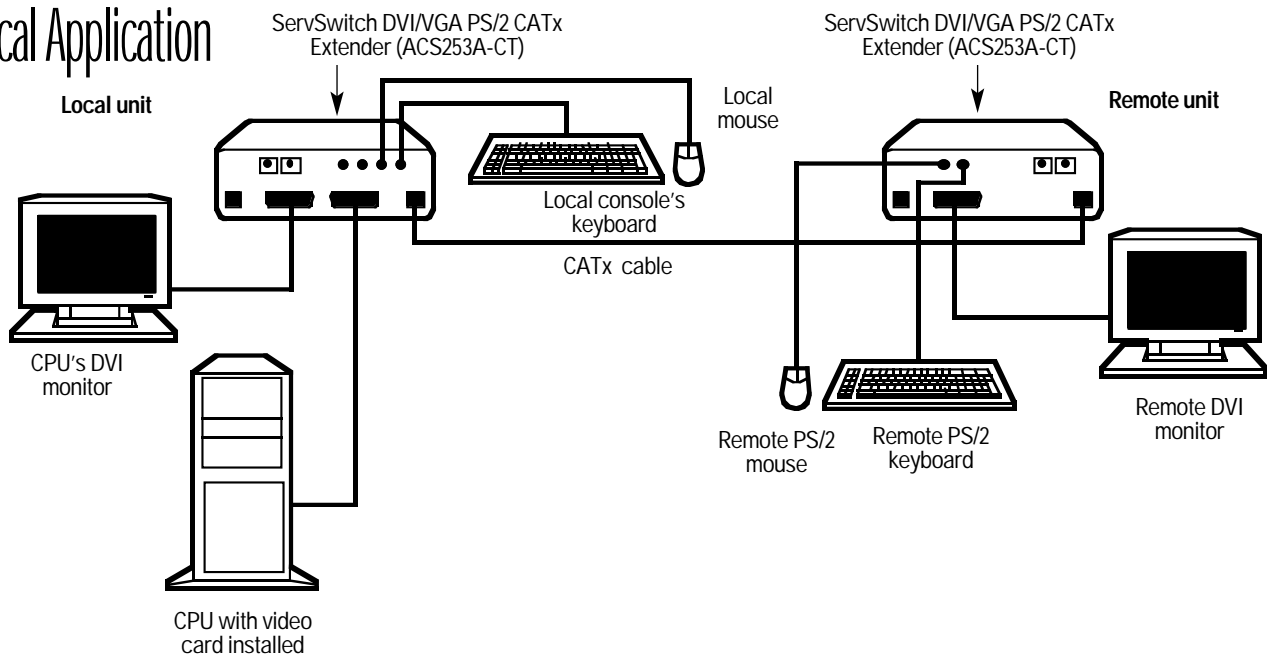
All models include a local unit (transmitter) and a remote unit (receiver). Connect the local unit to the computer's CPU or server directly with the included PS/2 cable, and attach the KVM console to the remote unit.

DVI and VGA adapters are also included.

The extenders work best with DVI (Digital Visual Interface) video displays. However, they also work with VGA displays, too, with an adapter cable.

Diagnostic LEDs on both local and remote units tell you link status, when the devices are ready, and when the units detect a video signal or valid mode. There's also an LED to indicate communication errors.

Typical Application



Specifications

Video Compatibility: Analogue:
VGA to XGA (separate sync,
Composite sync, or sync-on-
green);
Digital: DVI

Video Resolution (Maximum):
Monitor:
VGA: 1600 x 1200 at 60 Hz;
DVI: 1600 x 1200 at 60 Hz;
Local access: VGA: 1600 x 1200;
DVI: 1280 x 1024

Distances (Maximum):
CATx: 300 ft. (91.4 m);
Multimode:
62.5 μ : 650 ft. (198.1 m);
50 μ : 1300 ft. (396.2 m);
Single-mode: 9 μ : 6.25 mi.
(10.1 km)

Fibre Optic Beam Divergence:
ACS253A-MM: 12°;
ACS253A-SM: 4°

Fibre Optic Wavelength:
ACS253A-MM: 850 nm;
ACS253A-SM: 1300 nm

Fibre Optic Total Output Power:
ACS253A-MM:
< 400 μ W (as defined by IEC:
50-mm aperture at 10-cm
distance);
< 70 μ W (as defined by FDA:
7-mm aperture at 20-cm
distance);
ACS253A-SM:
< 2000 μ W (as defined by IEC:
50-mm aperture at 10-cm
distance);
< 180 μ W (as defined by FDA:
7-mm aperture at 20-cm
distance)

**Receiver Typical Sensitivity
(Average Power):**
ACS253A-MM: -20 dBm
(-17 dBm maximum);
ACS253A-SM: -22 dBm
(-20 dBm maximum)

Receiver Optical Budget Total:
ACS253A-MM: -14 dBm
(-6.5 dBm minimum);
ACS253A-SM: -18 dBm
(-8 dBm minimum)

**Transmitter Typical Launch Power
(Average) Into Fibre:**
ACS253A-MM:
50 μ or 62.5 μ : -5 dBm
(-9.5 dBm minimum);
ACS253A-SM: 9 μ : -3 dBm
(-11 dBm minimum)

Connectors: ACS253A-CT: Local unit:
(1) RJ-45 (CPU input);
Remote unit: (1) RJ-45;
ACS253A-MM, ACS253A-SM:
Local unit: (1) pair of SC;
Remote unit: (1) pair of SC;
Video: Both local and remote
units: (1) DVI-I M (for both DVI
and VGA connections);
Programming: Both local and
remote units: (1) RJ-11

Indicators: (4) LEDs on both local
and remote units:
(1) Communication Error (flashing
indicates errors detected);
(1) Link Status (flashing indicates
interconnection cable is not
connected or not functioning);

(1) Device Ready (on indicates
device is ready);
(1) Video Signal (on indicates a
video signal or valid mode is
detected)

Temperature Tolerance: Operating:
50 to 113°F (10 to 45°C);
Storage: 23 to 131°F (-5 to +55°C)

Humidity Tolerance: 80%,
noncondensing

Power: 90–240 VAC, 47–63 Hz,
autosensing, external

Size: Each local and remote unit:
5.2"H x 6.7"W x 1.7"D
(13.2 x 17 x 4.3 cm)

Weight: Each local and remote unit:
2.2 lb. (1 kg)

What's Included

- (1) local unit
- (1) remote unit
- (2) universal power supplies ([1] for local unit, [1] for remote unit) and (2) power cords
- (1) DVI-I video cable (DVI-I male-to-female)
- (1) KVM CPU cable set, 6-ft. (1.8-m), with PS/2 (6-pin mini-DIN male-to-male) keyboard and mouse connector and a DVI-I video (DVI-1 dual-link male-to-male) connector
- (1) DB9 male to RJ-11 programming cable
- (2) DVI-I to VGA adapters (DVI-I male to HD15 female)
- (1) VGA to DVI-I adapter (HD15 male to DVI-I female)
- Users' manual

Ordering Information

ITEM	CODE
ServSwitch DVI/VGA PS/2 Extenders	
CATx	ACS253A-CT
Multimode.....	ACS253A-MM
Single-Mode.....	ACS253A-SM
<i>To rackmount your extenders, order...</i>	
19" Rackmount Kit.....	RMK253A
<i>If you need an extra power supply, order...</i>	
Power Supply	PS253A
<i>You may also need...</i>	
Ceramic Terminated Multimode Fibre Optic Cable, SC-SC, Duplex, Riser, Custom Lengths	EFN4025
Single-Mode Fibre Optic Cable, Duplex, 9- μ m/125- μ m, SC-SC, PVC, Custom Lengths	EFN5010