

17-inch Lift Up Drawer Series with Improved Operability and Visibility on a 17-inch Large-Screen Monitor **SERVIS™** Lift Up Drawer (17-inch) **FD-5100 Series**

Operability and visibility in the server room rack environment has been improved with a 17-inch LCD monitor, a keyboard, and our original optical reflection mouse in a minimal 19-inch rack 1U space.

Overview

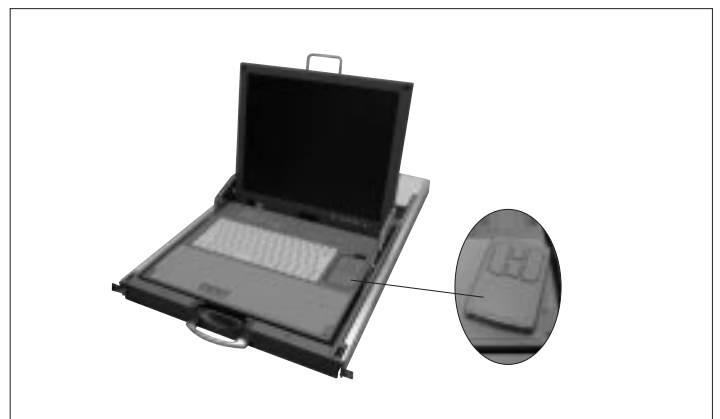
The demand for servers is constantly increasing in the information-processing industry, which advances in the unit of seconds or minutes, and the number of server units installed continues to grow. In concurrence with the increase in the number of units installed, rack-mount-type products in which space saving is pursued by mounting on a 19-inch rack are becoming conventional. In environments that manage and control servers, the demand for space saving is strong. As such, we have commercialized the **SERVIS** Series including intelligent KVM switches and console drawers, which allow 19-inch rack mounting and provide a solution for efficient server management and control. These products have been introduced in our customer systems in a wide range of fields and have been well received as a result of their excellent reliability, switching stability, installation workability, etc.

The newly developed 17-inch Lift Up drawer, **SERVIS** Lift Up Drawer (17-inch)/FD-5100 Series is the console drawer of our new series that addresses the demands of our customers who

have already adopted **SERVIS** Lift Up Drawer and those who are considering adopting it.

This product delivers further improved visibility and operability through a monitor upgrade to a 17-inch TFT liquid-crystal display (resolution 1,280×1,024, display color of 1,677

Photo 1 External View



ten-thousand colors). It also inherits the operability and space-saving compactness of the popular SERVIS Lift-Up Drawer/FD-5000 Series. In addition to the increased visibility provided by the large screen, support for high-resolution SXGA (1,280×1,024) has been provided to address the increasing demand for SXGA in system management applications. It is also a multiplatform that supports Sun.

Fig.1 illustrates the trends in servers.

A new-concept optical reflection mouse is incorporated as standard equipment. This mouse delivers operability that is comparable to that of conventional optical mice by moving the operation block, which is a thin card. For the keyboard, an 83/84-key, 3.0 mm keystroke product with touch-key touch features and a good record in the FD-1000/FD-5000 Series is used. In addition, KVM switch (8-/16-port)–mounted products, which enable space saving in the rack, are also lined up for the selection in order to suit various customer system structures.

Fig.2 presents an example of the connection of a 16-port KVM switch–mounted system.

Product Features

■ Integrated high-resolution 17-inch TFT liquid-crystal display (1,280×1,024 75Hz)

While improving the work environment through increased visibility on a large screen, SXGA, for which demands are increasing in system management applications, has been addressed through high-resolution SXGA (1,280×1,024). Furthermore, it is a multiplatform that supports Sun interface requests and has a longer-lasting liquid-crystal display with a menu that enables various screen adjustments (with an automatic backlighting shutoff switch when the display is stored).

■ A flat operation surface realized through automatic lift up of the keyboard section (patent pending)

This product adopts a lift-up mechanism in which the operation block is raised automatically in coordination with monitor movement when the monitor is opened. A flat operation surface without partitioning has been realized.

Fig.3 illustrates the lift-up mechanism.

■ Increased operability through a thin optical reflection mouse (patent pending)

This series mounts a newly developed optical reflection mouse which satisfies demands for both operability and compactness. Although thin, it has operability comparable to conventional optical mice.

This mouse points by reflecting the light emitted from the

Figure 1 Trends in Servers

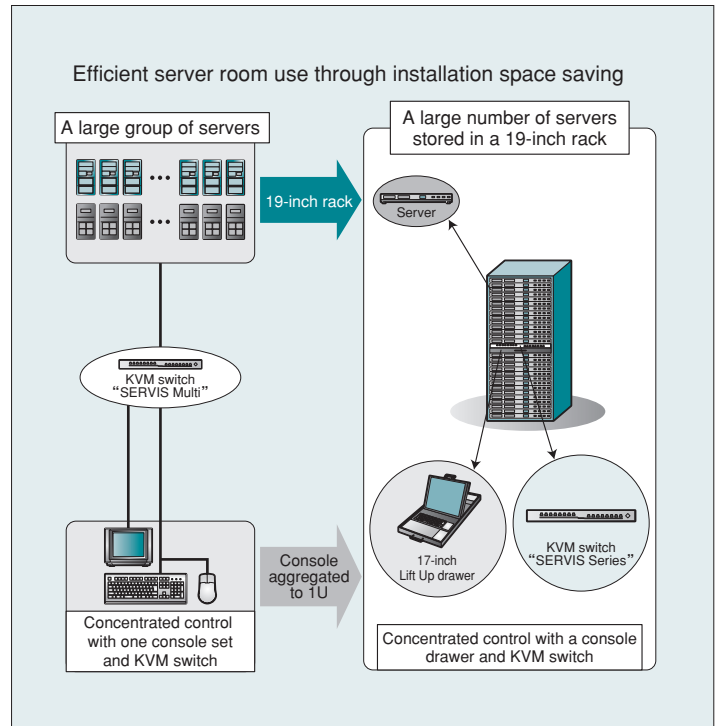
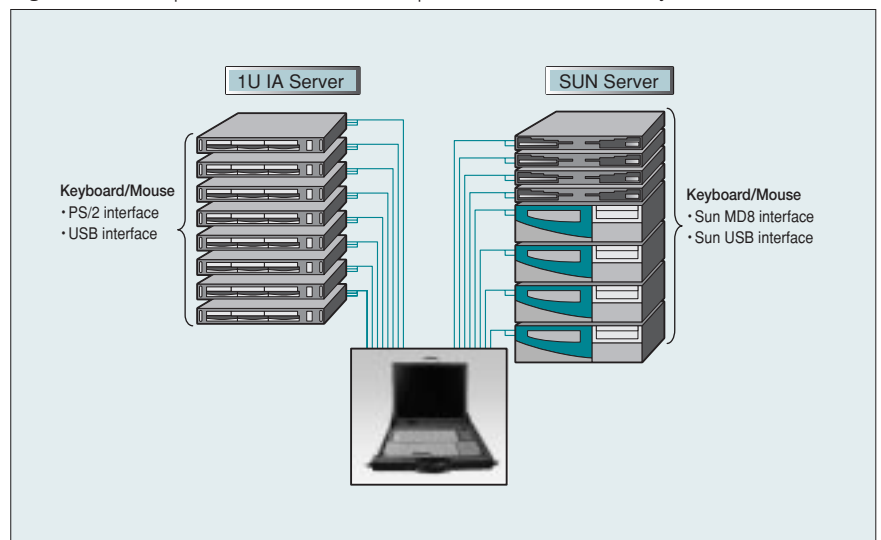


Figure 2 An Example of the Connection of a 16-port KVM Switch–Mounted system (FD-5116MT/U)



built-in LED in the main unit against the card-type operation block. Right, left, and vertical scroll buttons are contained in the operation block, and button information is communicated using infrared. The power is supplied by the built-in rechargeable battery, and it is charged automatically when the mouse is returned to the specified storage position.

Right and left buttons are also provided at the front of the operation block on the drawer's main unit, and dragging operation is easier with these. Operation is possible using any flat object (e.g., a business card) and the buttons on the main unit in case of emergency such as loss of the operation block.

Fig.4 depicts the reflection mouse and the main unit buttons.

Multiple models are supported for connection

This product and the PC/server are connected using a special cable. It is possible to connect to PS/2, USB, or Sun (MD8) by selecting a special cable to suit the PC/server interface.

Lineup of KVM switch – mounted models (8-/16-port)

For the KVM switch, SERVIS Series, which has a good reputation for high reliability and switching stability, has been incorporated. It supports various server interfaces including PS/2, USB, and Sun (MD8p).

On-Screen Display (OSD) function (products mounted with 8-/16-port KVM switches)

The server can be selected using the keyboard or the mouse while viewing the OSD menu. Hot-key buttons are provided to display the OSD menu with one-touch operation.

Easy installation with our original guide-rail installation method that supports various racks

Since the device is installed by fixing the drawer to the guide rail, installation can easily be carried out by just one person. In addition, each guide rail can be adjusted from 590 to 750mm and three types are available to suit the installation method. It is possible to mount the device on various racks.

Fig.5 presents an application example.

Specifications

Table 1 presents the specifications of this product.

Application

For bulk control of servers and improved efficiency

- Monitoring/managing many servers
- Construction of 19-inch rack mount servers

For improved operability in the rack environment

- Pointing input is carried out with a mouse

Future Development

In recent years, wide-range networks that are not limited to a single building or property have been constructed in plants and branch offices. As such, questions have arisen as to how to efficiently operate and manage servers and various network devices distributed at several different points with a limited number of operators.

In concurrence with such changes in the network environment, there has also been a demand for products that enable the

Figure 3 Lift Up Mechanism

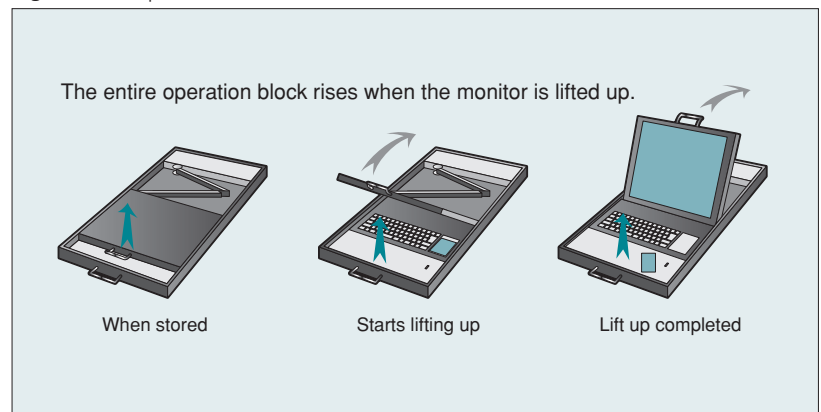
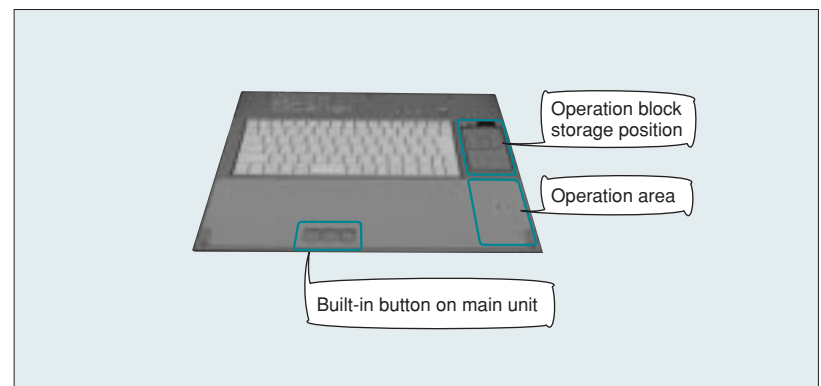


Figure 4 Reflection Mouse and the Main Unit Buttons



control/management of many servers and peripheral devices via a network. To satisfy such demands, FUJITSU is working to develop and commercialize new products including a serial console switch, a Ip-KVM switch, and a multi-user KVM switch. *

NOTES

* SERVIS is a trademark of FUJITSU COMPONENT LIMITED.

Figure 5 Application Example

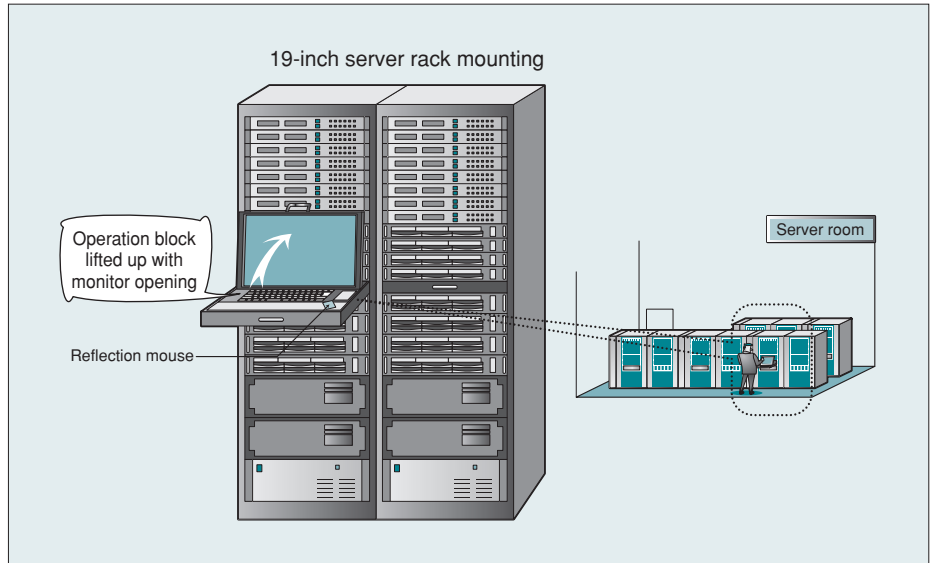


Table 1 Specifications

Product name		SERVIS Lift Up Drawer 17-inch Multi*1		
Model		FD-5100MT/U	FD-5108MT/U	FD-5116MT/U
Supported models		Sun (MD8pin, USB) *2 PC (PS/2, USB) *2		
Console input terminal		DVI 29pin (female) Original interface	MINI DIN6×2 PS/2	
Number of KVM switch ports		—	8 ports	16 ports
Selection method		—	With hot key, OSD	
Liquid-crystal display		17-inch TFT color LCD 1,280×1,024 75Hz		
H. Vsync synchronization signal		Separate/composite sync supported		
Console	Keyboard	83/84-key		
	Mouse	Optical reflection mouse		
KVM switchconsole port	Keyboard	—	Mini DIN8pin (female)×1 Mini DIN6pin (female)×2	
	Monitor	—	DB15HD (female) ×1	
KVM switch PC port*3		—	DB15HD (female) ×8	DB15HD (female) ×16
Power supply		AC100V/0.6A to AC240V/0.3A (without KVM)		
External dimension (main unit)		When stored: 486 (W)×685 (D)×43 (H) mm When used: 486 (W)×1,215 (D)×325 (H) mm (when LCD is drawn out)		
Weight (main unit)		14kg	16kg	
Accessories		AC100V power-supply cable (for U.S. only)		
Options	19-inch special attachment guide rail*4	NC14003-T591 ANSI/EIA-310-D (Universal pitch/M6×3) NC14003-T592 ANSI/EIA-310-D (Universal pitch/φ7×3)		
	Template	Template for Sun special key function		

* 1 : When using this product in connection with a Sun server, a graphic card is required in the server. In addition, it cannot be connected to models without a keyboard/mouse interface or models in which a graphic card cannot be mounted.

* 2 : The interface for the server connected to the console drawer can be selected from PS/2, USB, or Sun (MD8) depending on the cable used for the connection.

* 3 : Connection to a PC or Sun main unit is possible using special cables. Cables are available for PS/2, USB, and Sun (MD8) purposes.

* 4 : Please be sure to select and specify the special guide rail for rack mounting (two pieces/set).