Orion FX

ENTERPRISE KVM MATRIX SWITCH

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On the bottom we have our 80-port 2U chassis with 40 CATx and 40 fiber ports. On the top we see the 1U chassis with 40 CATx ports. Not shown here is our 4U chassis with up to 160 ports.

Features and Benefits

- A compact 1U, 2U, or 4U chassis with 16 to 160 ports and CATx, fiber, or both interfaces
- Each port becomes an input or output by connecting a transmitter or receiver unit for distances up to 100m on CATx or 10km on fiber
- Transmitters send source computer video, USB, audio, or other data on standard CATx/fiber media connected to Orion's link port
- Receivers convert Orion CATx or fiber signals into data for video displays and USB devices, such as keyboards and mice, making a user console
- Visually lossless video for a variety of formats, including HDMI and DisplayPort up to 4K60 resolution, and VGA and DVI up to 1080p
- Intuitive OSD with hot-key selection at each user console for ease of use and simplified switching
- Instant switching of devices with same resolution for efficient and reliable operation
- IP management via 2x RJ45 gigabit Ethernet control ports, with a comprehensive API
- 10G Matrix Grid feature for adding more ports by interconnecting Orion switches together
- Java based tool for configuration and management of switch and connected devices
- Redundant power supply is standard
- Advanced features include redundant channel, SNMPv3, and LDAPS

Product Overview

The Orion FX KVM Switch is a comprehensive product family for controlling access to computing resources. Orion XTender transmitter and receiver units connect to the FX switch. They are required to convert the native video, audio, and USB signals to CATx or fiber.

Switch ports are very flexible since they can be input or output. A port becomes an input by attaching a transmitter or an output by attaching a receiver.

The transmitter encodes computer video with a visually lossless and low latency algorithm. The video, USB, or other signals are packetized and sent on CATX or fiber media to the destination port as selected by the on-screen display or other means. The receiver then decodes the signal into its video, audio, and USB components to displays and peripherals.

DisplayPort and HDMI up to 4K60, and DVI and VGA up to 1080p deliver excellent video quality. USB devices such as keyboard, mouse, and touchscreen, USB 2.0 devices, serial RS232/RS422, and analog, digital or balanced audio are supported.

Orion FX units can be cascaded together using the Matrix Grid feature. You can distribute the switches for expansion and reduced and simplified wiring.

Read further to discover the extensive range of features that makes the Orion FX the premier product for professional KVM applications.

Applications The Orion FX is suitable for any application requiring centralized digital KVM matrix operation with either single head or varied video formats, and the integration of different peripheral devices.

Common applications include industrial control desks, broadcast studios, factory floor automation, AV distribution, outdoor broadcast vans, concert and theatre venues, medical imaging, military applications, and many others.

System description The Orion FX matrix switching system with its compact 1, 2, or 4RU size and up to 160 Flex-Ports is designed to support small to midsize applications as well as larger enterprise systems. Supporting both 2K60 and 4K60 video, the Orion FX can employ either 1G or 3G link speed within a chassis, using CATx and fiber interfaces for host and peripheral device connections. For fiber 3G speeds, single mode fiber cabling must be used.

Several chassis designs allow for both CATx and fiber links in the same switch, to support both intermediate and longer extension distances.

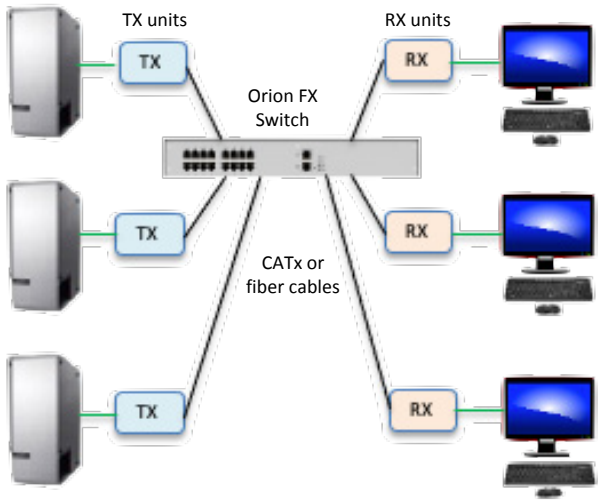
Automatic setup When an Orion XT transmitter or receiver is connected to an Orion FX switch, the internal control software recognizes and automatically configures the connection port as either a CPU or console device. This Flex-Port technology frees system installers from pre-configuring ports as inputs or outputs. The system also supports instant and artifact free switching between sources with the same resolution, reducing eye strain caused by the video tearing found in other systems.

Compatibility The Orion FX is compatible with all Orion XT extenders when they are connected to switch ports with the appropriate link speed. Multiple simultaneous video formats are supported on the same link speed (1G or 3G), including DVI-D, DVI-I, DisplayPort and HDMI. Some video formats can be mixed, for example, DVI-in and HDMI-out.

Video interfaces supported The Orion FX provides its switching and management function by receiving and transmitting digitized signals between the connected transmitter and receiver devices. Video signals supported by Orion FX include the following:

- VGA up to 1920×1200@60Hz (via DVI-I)
- DVI-D single-link up to 1920×1200@60Hz, and 2048×1152@60Hz
- HDMI video with embedded audio up to 1920×1200@60Hz, and 2048x1152@60Hz
- HDMI 2.0 video with embedded audio up to 4096x2160@60Hz
- DisplayPort 1.1 single-head or dual-head video with embedded audio up to 4096×2160@30Hz
- DisplayPort 1.2 video with embedded audio up to 4096×2160@60Hz

For more information, consult the Orion XTender data sheet for details of the transmitter and receiver interfaces available.



Standard Orion FX configuration

Peripheral interfaces supported The following peripheral device signals are supported and switched through the Orion FX.

- USB-HID for keyboard, mouse, touchscreen, and other pointing devices
- USB 2.0 devices up to 480Mbps
- Digital or balanced audio
- Analog audio
- Serial RS-232 and RS-422 up to 115,200 baud

Models available The Orion FX switch is available in a range of 1U, 2U and 4U chassis, each with a fixed number of ports. The number and type of ports varies with the switch model, but all ports on a switch have the same link speed, either 1G or 3G. There are four types of Orion FX chassis:

Orion FX CATx, 1G or 3G
16, 24, 32, 40, 48, 64, 80, 120, 128, 144, 160 ports

Orion FX Fiber, 1G or 3G
16, 24, 32, 40, 48, 64, 80, 120, 128, 144, 160 ports

Orion FX Hybrid (mixed CATx/Fiber), 1G or 3G
40, 64, 80, 120, 160 ports

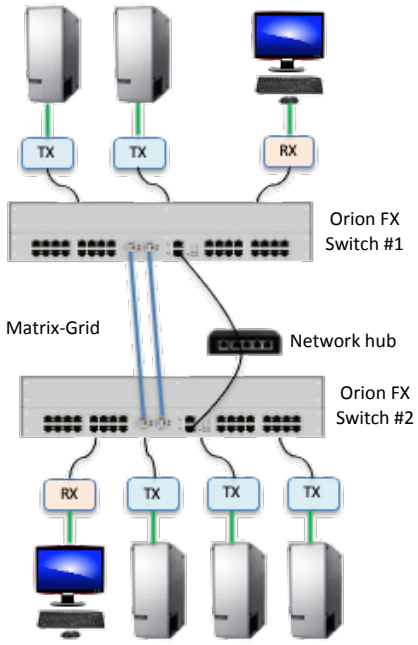
Orion FX with Matrix Grid, CATx/Fiber 1G
32 ports

Switch ports can have 1G or 3G CATx ports with RJ45 connectors, or 1G or 3G fiber ports with LC fiber connectors.

Each chassis has two RJ45 gigabit Ethernet ports available for switch management via the Java GUI tool. When the system is configured for Matrix Grid operation, these ports are used to share the network configuration details between switches.

Each chassis includes an internal power supply with an IEC power connector. A redundant power supply option is available for increased system reliability.

Matrix Grid connectivity Using the 10G Matrix Grid option, multiple Orion FX switches can be interconnected in a decentralized KVM matrix system using Matrix Grid technology. The grid lines support multiple simultaneous user connections across the grid network. The Matrix Grid can be configured using either the OSD or the Java tool.



Structure of a Matrix Grid network

Operation, management, and control There are several industry standard methods for managing and controlling the Orion FX switch. Keyboard hot-key switching is the standard access method and an intuitive OSD (on-screen display) can be viewed from any workstation console. The Java GUI tool is used for configuration, security settings, and system maintenance. The Orion FX switch can also be controlled through an external media controller using the Orion API and the gigabit Ethernet network port.

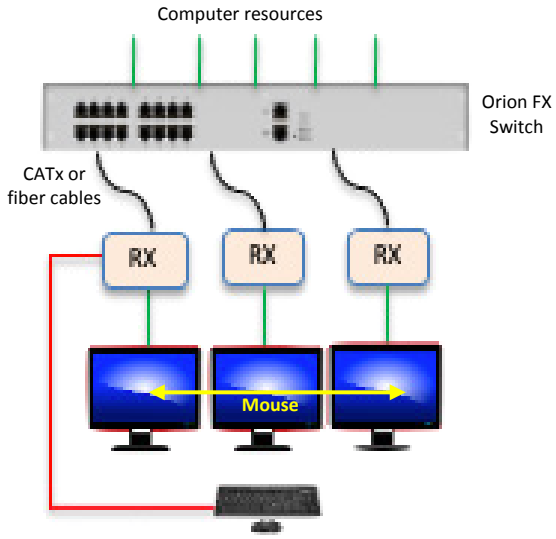
SNMP and Syslog monitoring is provided as a standard feature of the Orion FX switch family.

Methods of operation The Orion FX can be configured as a single head KVM matrix switch with up to 160 I/O ports. As the I/O ports are self-configuring, the user has total flexibility over the number of computers, video sources and users connected to the switch. Non-blocking access is provided for all users to all connected computers. The management software facilitates setting access rights and priorities. Users can be assigned full access, video access or no access to computers. Video sharing between users is also an option.

The parallel stacking utilizes two Orion FX switches linked via the network RJ45 ports. Switching commands issued on the primary switch are replicated and the second Orion switches in tandem. The parallel operation can also be used as a redundant path for user access to all resources. For all configurations, the switching command mode is activated by keyboard hot keys to provide direct OSD access at any user monitor.

System software The Orion FX switch includes full software for switch management, switching control, CPU and user naming, password and access control and a matrix view showing all available connections. Monitoring tools like SNMPv3 and Syslog are also included. Operation of the Orion FX switch is primarily through the OSD windows at each user station. The Java tool can also be used to switch computers. For additional software such as API for integration with external media controllers, please contact Rose Electronics.

Multi-screen control This feature enables a single USB keyboard and mouse to switch between up to 8 connected computers. Groups of monitors can be positioned together in dual-head or quad-head configuration or set up as a control desk display area and controlled by a single mouse and/or keyboard.



By moving the mouse beyond the edge of the current display to an adjacent display, switching to the computer connected to the adjacent display is activated. The displays can be arranged side-by-side, in a grid pattern, or completely freely.

Specifications

Dimensions (W x D x H)	1U switches 2U switches 4U switches	17.7" × 17.4" × 1.7" (449 × 442 × 44 mm) 17.7" × 17.4" × 3.5" (449 × 442 × 90 mm) 17.7" × 17.4" × 7.0" (449 × 442 × 177 mm)
Weight (Varies by model)	1U switches 2U switches 4U switches	17.0lb (7.7Kg) 24.3lb (11Kg) 41.9lb (19Kg)
Rack space port count	1U switches 2U switches 4U switches	16, 24, 32, 40 ports 48, 64, 80 ports, 32 port with Matrix Grid, Custom Design 120, 128, 144, 160 ports
Input - output	16× to 160× CATx (RJ45) or LC Fiber 2× RJ-45 gigabit Ethernet for management	
Link cable distance	CATx Patch Cable CATx Installation Cable Multi-mode 50µm Multi-mode 50µm OM3 Single-mode 9µm, XV Single-mode 9µm	230ft (70m) 460ft (140m) 1312ft (400m) 3,280ft (1km) 16,404ft (5km) 32,808ft (10km)
Link bandwidth	CATx / Fiber 1G CATx /Fiber 3G	1.25 Gbits/s 3.125 Gbits/s
Note: Fiber 3G requires single mode fiber cabling		
Control	OSD (On screen display), JAVA tool (included), API	
Supported signals	DisplayPort, HDMI, DVI-D, DVI-I, VGA USB 2.0, USB-HID, RS232, RS422 Analog, digital, or balanced audio	
Resolution	VGA video: Up to1920×1200@60Hz (via DVI-I interface) DVI-D single-link: Up to 1920×1200@60Hz and 2048×1152@60Hz HDMI video with embedded audio: Up to 1920×1200@60Hz, and 2048x1152@60Hz HDMI 2.0 video with embedded audio: Up to 4096x2160@60Hz DisplayPort 1.1 single-head or dual-head video with embedded audio: Up to 4096×2160@30Hz DisplayPort 1.2 video with embedded audio: Up to 4096×2160@60Hz	
Approvals	CE, Low Voltage Directive, FCC Class A, RoHS, WEEE	

Power Maximum current, voltage range, and typical operating watts	<u>16-port switch:</u> CATx 1G: 3.9A, 100-240V, 53.7W CATx 3G: 5.3A, 100-240V, 72.9W Fiber 1G & 3G: 3.9A, 100-240V, 72.9W <u>24-port switch:</u> CATx 1G: 5.1A, 100-240V, 69.3W CATx 3G: 7.2A, 100-240V, 98.1W Fiber 1G & 3G: 5.1A, 100-240V, 98.1W <u>32-port switch:</u> CATx 1G: 6.2A, 100-240V, 85.0W CATx 3G: 9.0A, 100-240V, 123.4W Fiber 1G & 3G: 6.2A, 100-240V, 123.4W <u>40-port switch:</u> CATx 1G: 7.3A, 100-240V, 100.6W CATx 3G: 10.8A, 100-240V, 148.6W Fiber 1G & 3G: 7.4A, 100-240V, 148.6W <u>48-port switch:</u> CATx 1G: 9.6A, 100-240V, 126.6W CATx 3G: 13.8A, 100-240V, 182.0W Fiber 1G & 3G: 9.6A, 100-240V, 182.0W <u>64-port switch:</u> CATx 1G: 11.9A, 100-240V, 157.4W CATx 3G: 17.5A, 100-240V, 231.2W Fiber 1G & 3G: 11.9A, 100-240V, 231.2W <u>80-port switch:</u> CATx 1G: 14.3A, 100-240V, 188.1W CATx 3G: 21.3A, 100-240V, 280.4W Fiber 1G & 3G: 14.3A, 100-240V, 280.4W <u>120-port switch:</u> CATx 1G: 21.9A, 100-240V, 279.6W CATx 3G: 32.4A, 100-240V, 413.6W Fiber 1G & 3G: 21.9A, 100-240V, 413.6W <u>128-port switch:</u> CATx 1G: 23.1A, 100-240V, 294.5W CATx 3G: 34.3A, 100-240V, 437.4W Fiber 1G & 3G: 23.1A, 100-240V, 437.4W <u>144-port switch:</u> CATx 1G: 25.4A, 100-240V, 324.3W CATx 3G: 38.0A, 100-240V, 485.1W Fiber 1G & 3G: 25.4A, 100-240V, 485.1W <u>160-port switch:</u> CATx 1G: 27.8A, 100-240V, 354.0W CATx 3G: 41.8A, 100-240V, 532.8W Fiber 1G & 3G: 27.7A, 100-240V, 532.8W
Environment	Operating Temperature: 41°F to 113°F (5°C to 45°C) Storage Temperature: -13°F to 140°F (-25°C to 60°C) Relative Humidity: Max. 80% non-condensing Operating Altitude: Max. 8,200ft (2.5km) Heat Dissipation: Corresponds to power consumption in Watt (W)

Orion FX CATx 1G/3G models

1U Height

Fig.1 – 16 port

Fig.2 – 24 port

Fig.3 – 32 port

Fig.4 – 40 port

2U Height

Fig.5 – 48 port

Fig.6 – 64 port

Fig.7 – 80 port

4U Height

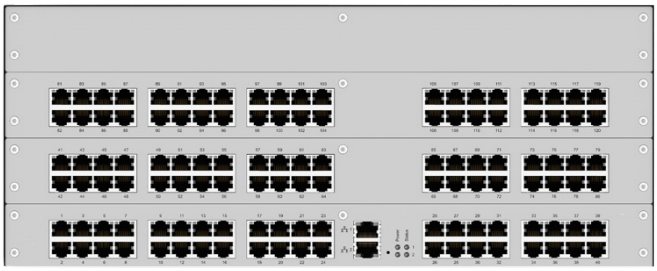


Fig.8 – 120 port

Fig.9 – 128 port

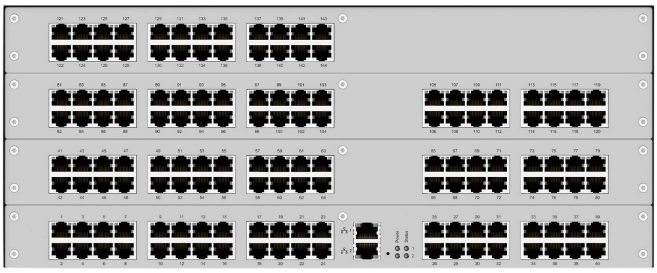


Fig.10 – 144 port

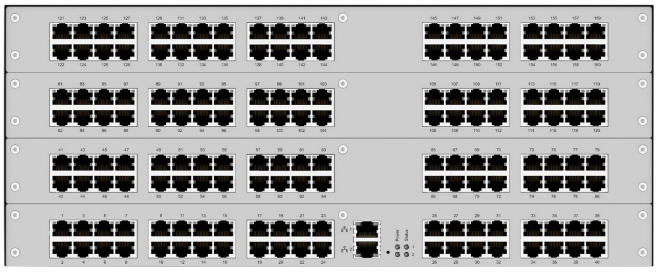


Fig.11 – 160 port

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Orion FX Fiber 1G/3G models

1U Height

Fig.12 – 16 port

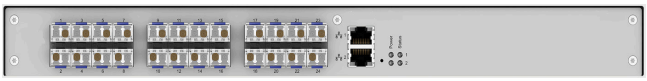

Fig.13 – 24 port

Fig.14 – 32 port

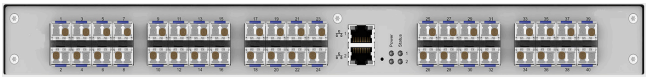

Fig.15 – 40 port

2U Height

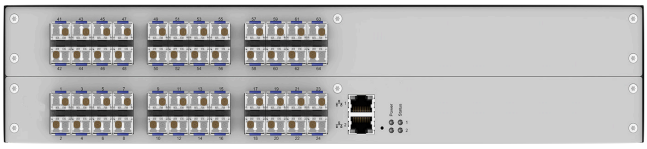

Fig.16 – 48 port

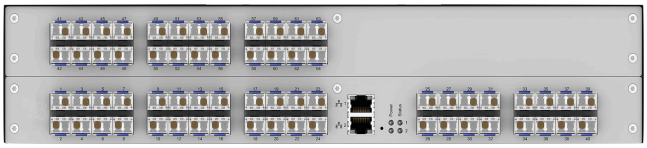

Fig.17 – 64 port

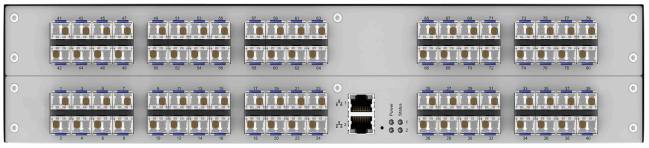

Fig.18 – 80 port

4U Height

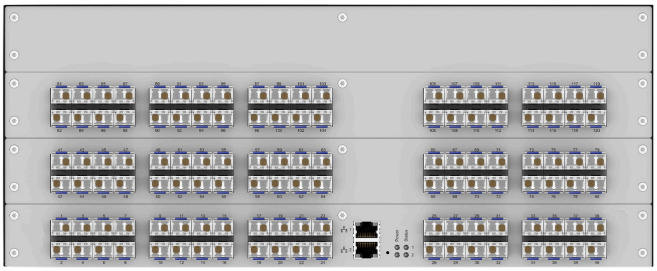

Fig.19 – 120 port

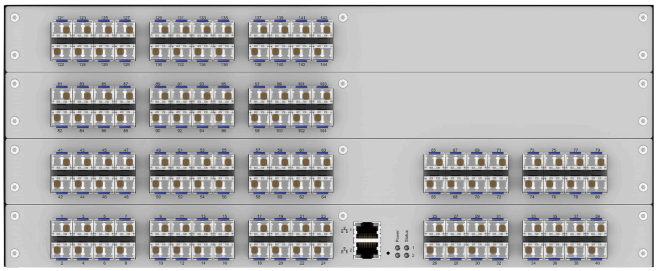

Fig.20 – 128 port

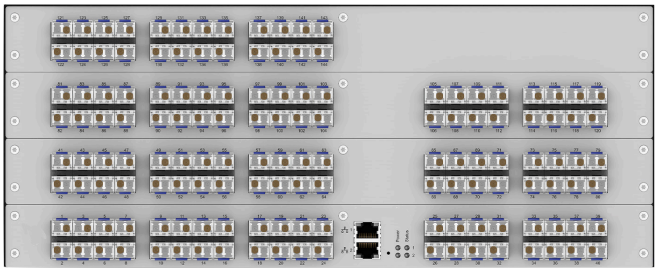

Fig.21 – 144 port

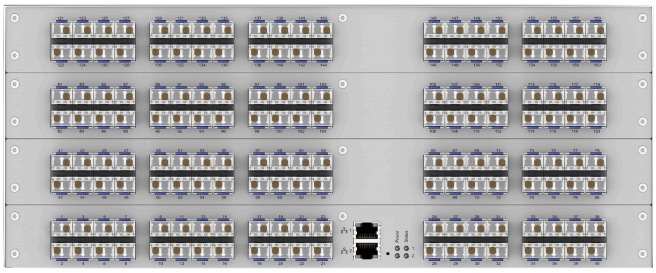

Fig.22 – 160 port

Orion FX Hybrid (Mixed CATx and Fiber) 1G/3G models

Fig.23 – 40 port, 1U

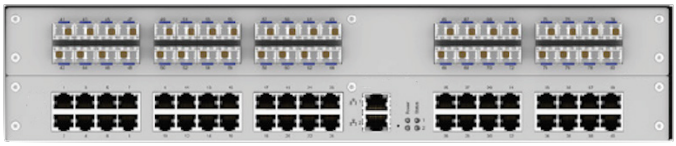

Fig.24 – 80 port, 2U

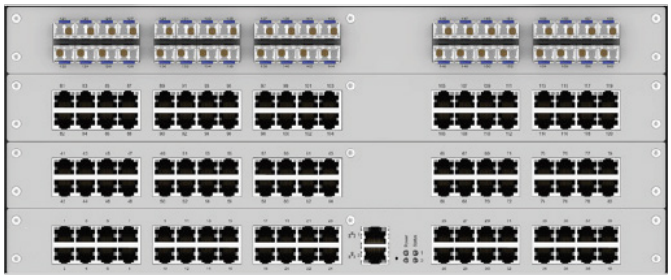

Fig.25 – 160 port,4U

MATRIX GRID with CATx and fiber port versions

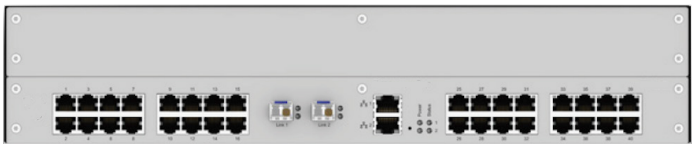

Fig.26 – 32 port, CATx Matrix Grid, 2U

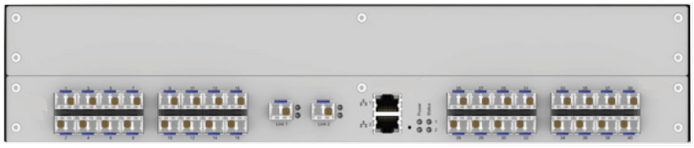

Fig.27 – 32 port, Fiber Matrix Grid, 2U

Custom design versions

Fig.28 – 40 port, Custom Design 1G/3G 2U

Call us for other possible Hybrid, Matrix Grid, and custom design chassis configurations

Part numbers

Orion FX switch – CATx ports 1G		
OXS-FX016-TP	Fig. 1	Orion FX, 16 port matrix switch, redundant PSU, CATx, 1G, 1U
OXS-FX024-TP	Fig. 2	Orion FX, 24 port matrix switch, redundant PSU, CATx, 1G, 1U
OXS-FX032-TP	Fig. 3	Orion FX, 32 port matrix switch, redundant PSU, CATx, 1G, 1U
OXS-FX040-TP	Fig. 4	Orion FX, 40 port matrix switch, redundant PSU, CATx, 1G, 1U
OXS-FX048-TP	Fig. 5	Orion FX, 48 port matrix switch, redundant PSU, CATx, 1G, 2U
OXS-FX064-TP	Fig. 6	Orion FX, 64 port matrix switch, redundant PSU, CATx, 1G, 2U
OXS-FX080-TP	Fig. 7	Orion FX, 80 port matrix switch, redundant PSU, CATx, 1G, 2U
OXS-FX0120-TP	Fig. 8	Orion FX, 120 port matrix switch, redundant PSU, CATx, 1G, 4U
OXS-FX0128-TP	Fig. 9	Orion FX, 128 port matrix switch, redundant PSU, CATx, 1G, 4U
OXS-FX0144-TP	Fig. 10	Orion FX, 144 port matrix switch, redundant PSU, CATx, 1G, 4U
OXS-FX0160-TP	Fig. 11	Orion FX, 160 port matrix switch, redundant PSU, CATx, 1G, 4U

Orion FX switch – CATx ports 3G		
OXS-FX016-T3	Fig. 1	Orion FX, 16 port matrix switch, redundant PSU, CATx, 3G, 1U
OXS-FX024-T3	Fig. 2	Orion FX, 24 port matrix switch, redundant PSU, CATx, 3G, 1U
OXS-FX032-T3	Fig. 3	Orion FX, 32 port matrix switch, redundant PSU, CATx, 3G, 1U
OXS-FX040-T3	Fig. 4	Orion FX, 40 port matrix switch, redundant PSU, CATx, 3G, 1U
OXS-FX048-T3	Fig. 5	Orion FX, 48 port matrix switch, redundant PSU, CATx, 3G, 2U
OXS-FX064-T3	Fig. 6	Orion FX, 64 port matrix switch, redundant PSU, CATx, 3G, 2U
OXS-FX080-T3	Fig. 7	Orion FX, 80 port matrix switch, redundant PSU, CATx, 3G, 2U
OXS-FX0120-T3	Fig. 8	Orion FX, 120 port matrix switch, redundant PSU, CATx, 3G, 4U
OXS-FX0128-T3	Fig. 9	Orion FX, 128 port matrix switch, redundant PSU, CATx, 3G, 4U
OXS-FX0144-T3	Fig. 10	Orion FX, 144 port matrix switch, redundant PSU, CATx, 3G, 4U
OXS-FX0160-T3	Fig. 11	Orion FX, 160 port matrix switch, redundant PSU, CATx, 3G, 4U

Orion FX switch – Fiber single mode ports 1G		
OXS-FX016-FS	Fig. 12	Orion FX, 16 port matrix switch, redundant PSU, Fiber SM, 1G, 1U
OXS-FX024-FS	Fig. 13	Orion FX, 24 port matrix switch, redundant PSU, Fiber SM, 1G, 1U
OXS-FX032-FS	Fig. 14	Orion FX, 32 port matrix switch, redundant PSU, Fiber SM, 1G, 1U
OXS-FX040-FS	Fig. 15	Orion FX, 40 port matrix switch, redundant PSU, Fiber SM, 1G, 1U
OXS-FX048-FS	Fig. 16	Orion FX, 48 port matrix switch, redundant PSU, Fiber SM, 1G, 2U
OXS-FX064-FS	Fig. 17	Orion FX, 64 port matrix switch, redundant PSU, Fiber SM, 1G, 2U
OXS-FX080-FS	Fig. 18	Orion FX, 80 port matrix switch, redundant PSU, Fiber SM, 1G, 2U
OXS-FX0120-FS	Fig. 19	Orion FX, 120 port matrix switch, redundant PSU, Fiber SM, 1G, 4U
OXS-FX0128-FS	Fig. 20	Orion FX, 128 port matrix switch, redundant PSU, Fiber SM, 1G, 4U
OXS-FX0144-FS	Fig. 21	Orion FX, 144 port matrix switch, redundant PSU, Fiber SM, 1G, 4U
OXS-FX0160-FS	Fig. 22	Orion FX, 160 port matrix switch, redundant PSU, Fiber SM, 1G, 4U

Orion FX switch – Fiber single mode ports 3G, requires single mode fiber cabling only		
OXS-FX016-F3	Fig. 12	Orion FX, 16 port matrix switch, redundant PSU, Fiber SM, 3G, 1U
OXS-FX024-F3	Fig. 13	Orion FX, 24 port matrix switch, redundant PSU, Fiber SM, 3G, 1U
OXS-FX032-F3	Fig. 14	Orion FX, 32 port matrix switch, redundant PSU, Fiber SM, 3G, 1U
OXS-FX040-F3	Fig. 15	Orion FX, 40 port matrix switch, redundant PSU, Fiber SM, 3G, 1U
OXS-FX048-F3	Fig. 16	Orion FX, 48 port matrix switch, redundant PSU, Fiber SM, 3G, 2U
OXS-FX064-F3	Fig. 17	Orion FX, 64 port matrix switch, redundant PSU, Fiber SM, 3G, 2U
OXS-FX080-F3	Fig. 18	Orion FX, 80 port matrix switch, redundant PSU, Fiber SM, 3G, 2U
OXS-FX0120-F3	Fig. 19	Orion FX, 120 port matrix switch, redundant PSU, Fiber SM, 3G, 4U
OXS-FX0128-F3	Fig. 20	Orion FX, 128 port matrix switch, redundant PSU, Fiber SM, 3G, 4U
OXS-FX0144-F3	Fig. 21	Orion FX, 144 port matrix switch, redundant PSU, Fiber SM, 3G, 4U
OXS-FX0160-F3	Fig. 22	Orion FX, 160 port matrix switch, redundant PSU, Fiber SM, 3G, 4U

Orion FX switch – Hybrid ports – mixed CATx and fiber 1G		
OXS-FX24TP16FS	Fig. 23	Orion FX, 40 port hybrid matrix switch, redundant PSU, 24×CATx, 16×FS, 1G, 1U
OXS-FX24TP40FS	Not shown	Orion FX, 64 port hybrid matrix switch, redundant PSU, 24×CATx, 40×FS, 1G, 2U
OXS-FX40TP24FS	Not shown	Orion FX, 64 port hybrid matrix switch, redundant PSU, 40×CATx, 24×FS, 1G, 2U
OXS-FX40TP40FS	Fig. 24	Orion FX, 80 port hybrid matrix switch, redundant PSU, 40×CATx, 40×FS, 1G, 2U
OXS-FX80TP40FS	Not shown	Orion FX, 120 port hybrid matrix switch, redundant PSU, 80×CATx, 40×FS, 1G, 4U
OXS-FX80TP80FS	Not shown	Orion FX, 160 port hybrid matrix switch, redundant PSU, 80×CATx, 80×FS, 1G, 4U
OXS-FX120TP40FS	Fig. 25	Orion FX, 160 port hybrid matrix switch, redundant PSU, 120×CATx, 40×FS, 1G, 4U

Orion FX switch – Hybrid ports – mixed CATx and fiber 3G		
OXS-FX24T316F3	Fig. 23	Orion FX, 40 port hybrid matrix switch, redundant PSU, 24×CATx, 16×FS, 3G, 1U
OXS-FX24T340F3	Not shown	Orion FX, 64 port hybrid matrix switch, redundant PSU, 24×CATx, 40×FS, 3G, 2U
OXS-FX40T324F3	Not shown	Orion FX, 64 port hybrid matrix switch, redundant PSU, 40×CATx, 24×FS, 3G, 2U
OXS-FX40T340F3	Fig. 24	Orion FX, 80 port hybrid matrix switch, redundant PSU, 40×CATx, 40×FS, 3G, 2U
OXS-FX80T340F3	Not shown	Orion FX, 120 port hybrid matrix switch, redundant PSU, 80×CATx, 40×FS, 3G, 4U
OXS-FX80T380F3	Not shown	Orion FX, 160 port hybrid matrix switch, redundant PSU, 80×CATx, 80×FS, 3G, 4U
OXS-FX120T340F3	Fig. 25	Orion FX, 160 port hybrid matrix switch, redundant PSU, 120×CATx, 40×FS, 3G, 4U

Orion FX switch – Matrix Grid version – 1G		
OXS-FX032G-TP	Fig. 26	Orion FX, 32 port matrix switch, redundant PSU, 32×CATx + Matrix Grid, 1G, 1U
OXS-FX032G-FS	Fig. 27	Orion FX, 32 port matrix switch, redundant PSU, 32×Fiber + Matrix Grid, 1G, 1U

Orion FX switch – Custom design version – with expansion capability in a 2U chassis, 1G and 3G		
OXS-FX040-TP-2U	Fig. 28	Orion FX, 40 port matrix switch, redundant PSU, 40×CATx, 1G, 2U
OXS-FX040-FS-2U	Not shown	Orion FX, 40 port matrix switch, redundant PSU, 40×Fiber, 1G, 2U
OXS-FX040-T3-2U	Fig. 28	Orion FX, 40 port matrix switch, redundant PSU, 40×CATx, 3G, 2U
OXS-FX040-F3-2U	Not shown	Orion FX, 40 port matrix switch, redundant PSU, 40×Fiber, 3G, 2U
OXS-FX24TP16FS-2U	Not shown	Orion FX, 40 port matrix switch, redundant PSU, 40×CATx, 16×FS, 1G, 2U
OXS-FX24T316F3-2U	Not shown	Orion FX, 40 port matrix switch, redundant PSU, 40×CATx, 16×FS, 3G, 2U
OXS-FX032G-TP-2U	Fig. 26	Orion FX, 32 port matrix switch, redundant PSU, 32×CATx + Matrix Grid, 1G, 2U
OXS-FX032G-FS-2U	Fig. 27	Orion FX, 32 port matrix switch, redundant PSU, 32×Fiber + Matrix Grid, 1G, 2U

Orion FX switch – Custom design version – with expansion capability in a 4U chassis, 1G and 3G		
OXS-FX040-TP-4U	Not shown	Orion FX, 40 port matrix switch, redundant PSU, 40×CATx, 4U, 1G
OXS-FX040-FS-4U	Not shown	Orion FX, 40 port matrix switch, redundant PSU, 40×Fiber, 4U, 1G
OXS-FX040-T3-4U	Not shown	Orion FX, 40 port matrix switch, redundant PSU, 40×CATx, 4U, 3G
OXS-FX040-F3-4U	Not shown	Orion FX, 40 port matrix switch, redundant PSU, 40×Fiber, 4U, 3G
OXS-FX24TP16FS-4U	Not shown	Orion FX, 40 port matrix switch, redundant PSU, 40×CATx, 16×FS, 4U, 1G
OXS-FX24T316F3-4U	Not shown	Orion FX, 40 port matrix switch, redundant PSU, 40×CATx, 16×FS, 4U, 1G
OXS-FX032G-TP-4U	Not shown	Orion FX, 32 port matrix switch, redundant PSU, 32×CATx + Matrix Grid, 4U, 1G
OXS-FX032G-FS-4U	Not shown	Orion FX, 32 port matrix switch, redundant PSU, 32×Fiber + Matrix Grid, 4U, 1G