



Features

- Up to 144 non-blocking serial I/O ports
- Up to 4.25 Gbps/port data rate
- 48 Small Form Factor Pluggable (SFP) transceiver modules per SFP port card
- Supports Loop, Point-to-Point, One-to-Many communication links
- Supports multiple physical media options including short wavelength multimode (850 nm), 1310 nm, 1550 nm, CWDM Singlemode, and HSSDC2
- Automatic port fault isolation
- Out-of-band control through an Ethernet port
- Front panel indicators
- Can be controlled from a remote location.
- Dual-redundant hot-swappable power supplies.
- Hot-pluggable Small Form-Factor transceiver modules
- Hot-pluggable port cards
- Configuration data stored on a removable CompactFlash card

Applications

- Crossbar switch
- Data Multicast
- Optical wavelength patch panel
- Fibre channel arbitrated loop hub

Optical Matrix Switch Design

The OLX-3000 is a managed, non-blocking cross-point switch for digital signals with speeds up to 4.25 Gbps. A single blade provides an up to 48-port switch solution, and two blades may be added to provide a total of 144 ports. The OLX-3000 is a physical layer switch, i.e., the protocol or structure of data routed through the switch is ignored and is unaltered by its passage through the switch.

The OLX-3000 holds up to 144 Small Form-factor Pluggable (SFP) transceiver modules. Each SFP transceiver module provides the physical ports for one input and one output. Any of the 144 outputs can be connected to any one of its 144 inputs. Each port input provides an option of data retiming or bypass of retiming. While the cross-point switch itself can operate from 0 Mbps to 4.25 Gbps, different types of SFP transceiver modules impose different limitations on the range of data rates or the data format they will pass.



The OLX-3000 has the following main functions:

- Routes signals from SFP transceiver module inputs to the selected SFP transceiver module outputs
- Provides an out-of-band command line interface
- Provides status information
- Provides fault isolation and simulation when required
- Provides increased resource sharing capabilities up to 50 km

The OLX-3000 is housed in a 4RU (177.8 mm) 19-inch rack-mountable enclosure. The enclosure includes an AC power connector, power switch, power on indicator and mounting ears, along with a built-in power supply and cooling fans.

Port cards containing 48 SFP ports are purchased separately. For OLX-3000 96x96 capability, the SFPB-4800 (2.5 Gbps per port) or SFPB-4800-RT (Reclocked, 4.25 Gbps per port) blade must be purchased. To achieve 144x144 switching capability, a second blade must also be purchased.

OLX-3000

Up to 144-Port Optical Matrix Switch



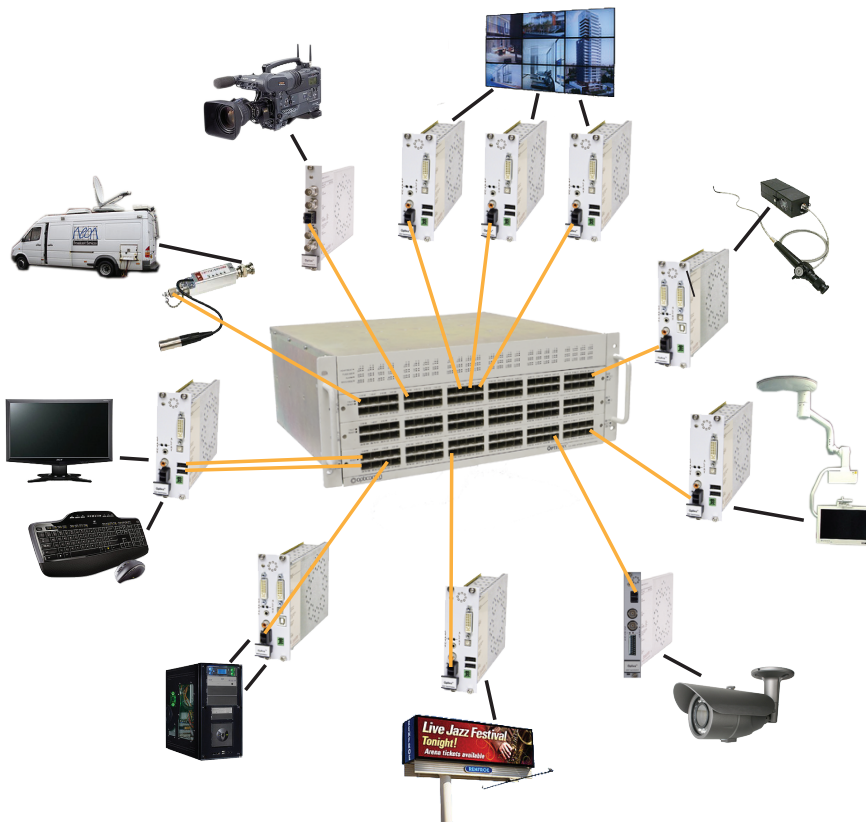
DATASHEET

FIBER OPTICS

Models

Model	Description
OLX-3000-144	Up to 144 x 144 Optical Switch (does not include port cards or SFP transceivers)
SFPB-4800	48 Port Insert Card, 2.5 Gbps per port
SFPB-4800-RT	48 Port Reclocked Insert Card, 4.25 Gbps per port

Sample Configuration



General

Specifications	Values
Dimensions (with handles and mounting ears)	19.05" W x 7.0" H x 17.72" L 484 mm by 178 mm by 450 mm
Dimensions (rack mount)	17.13" W x 7.0" H x 15.75" L 435 mm by 178 mm by 400 mm
Weight	43 lbs. (19.5 kg)
Storage Temperature	-40° C to +85° C
Operating Temperature	-10° C to +60° C
Humidity	10% to 90% (non-condensing)
Data Rates	Up to 4.25 Gbps per port (port card dependent)
Warranty	1 year

Monitoring & Control

Specifications	Values
Local	Front panel LED status and alert indicators; serial data interface
Remote	LinkView Remote Management Software

User Control Interface

The OLX-3000 is controlled through an RS-232 port or through a 10/100 Ethernet connection. The RS-232 interface uses an RJ-45 connector port. The LinkView SNMP user-control interface has these features:

- Comprehensive online help for each command
- Route configuration commands
- Switch routing displays
- Switch status and health information
- Command history, editing, and tab-completion
- Advanced features such as command auto-repeat, named port lists and scripts

The OLX-3000 front panel contains a reset button, an RJ-45 connector (RS-232 port), a 10/100 Ethernet port and Status LEDs. The Status LEDs include a "POWER ON" indicator, a "Heartbeat" LED and "Signal Detect" and "Transmitter On" LEDs for each port.

Compliance

