

# ExtremeSwitching SLX 9240 Technical Specifications

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# Contents

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## SLX 9240 Switch Technical Specifications

System specifications . . . . .	5
Ethernet . . . . .	5
LEDs. . . . .	6
Other. . . . .	6
Weight and physical dimensions . . . . .	6
Environmental requirements . . . . .	6
Power supply specifications (per PSU). . . . .	7
Power consumption (typical configuration) . . . . .	7
Power consumption (maximum configuration). . . . .	7
Data port specifications (Ethernet) . . . . .	7
Serial port specifications (pinout - mini-USB). . . . .	8
Serial port specifications (protocol) . . . . .	8
Memory specifications . . . . .	8
Regulatory compliance (EMC) . . . . .	8
Regulatory compliance (safety). . . . .	9
Regulatory compliance (environmental) . . . . .	9



# SLX 9240 Switch Technical Specifications

- System specifications ..... 5
- Ethernet..... 5
- LEDs ..... 6
- Other ..... 6
- Weight and physical dimensions..... 6
- Environmental requirements ..... 6
- Power supply specifications (per PSU) ..... 7
- Power consumption (typical configuration) ..... 7
- Power consumption (maximum configuration) ..... 7
- Data port specifications (Ethernet) ..... 7
- Serial port specifications (pinout - mini-USB) ..... 8
- Serial port specifications (protocol) ..... 8
- Memory specifications..... 8
- Regulatory compliance (EMC) ..... 8
- Regulatory compliance (safety) ..... 9
- Regulatory compliance (environmental)..... 9

## System specifications

System component	Description
Enclosure	Chassis-mountable on a desktop, or in a standard 2 or 4-post rack
Power supplies	Dual redundant, hot-swappable power supplies supported with 650 W AC intake or exhaust airflow, or 650 W DC intake or exhaust airflow.
Fans	Five (4+1) redundant, hot-swappable fan assemblies with intake or exhaust airflow. A sixth fan assembly can be installed for extended temperature range performance.
Cooling	Forced-air cooling front-to-back or back-to-front
System architecture	Non-blocking shared-memory switch
System processors	Intel Broadwell-DE D-1508 dual-core CPU running at 2.2 GHz

## Ethernet

System component	Description	Maximum ports supported
100 GbE QSFP28 ports	100/40 GbE QSFP28 ports	32
Ethernet management port	RJ-45 port with 10/100/1000 Mbps auto-negotiating capability	1

## LEDs

System component	Description
Device status and management	Two LED types indicate device status: Power (power supply) Status (diagnostics)
Ports	LEDs indicate port status (link/activity)

## Other

System component	Description
Serial cable	1 (Mini-USB to RJ-45)
RJ-45 to DB9 adapter	1 (RJ-45 port to female DB9 connector)
AC power cord	IEC 320-C14

## Weight and physical dimensions

Height	Width	Depth	Fully loaded weight (no transceivers)
4.37 cm 1.72 inches	44.0 cm 17.32 inches	44.47 cm 17.51 inches	9.07 kg 20.00 lb

## Environmental requirements

Condition	Operational	Non-operational
Ambient temperature	-5°C to 50°C (23°F to 122°F) (F2B) -5°C to 45°C (23°F to 113°F) (B2F), temporarily to 55°C with 6 fan assemblies	-40°C to 70°C (-40°F to 158°F)
Relative humidity	5% to 95% at 50°C (122°F)	5% to 95% at 70°C (158°F)
Altitude	0 to 3,000 m (9,843 ft) safety -60 to 4,000 m (13,123 ft) operational	0 to 12,000 m (39,370 ft)
Shock	20 G, 11 ms, half-sine wave	33 G, 11 ms, half-sine wave
Vibration	1 G sine, 0.4 grms random, 5-500 Hz	2.4 G sine, 1.1 grms random, 5-500 Hz
Airflow	134 cfm (estimated with 2 power supplies, 5 fan assemblies)	N/A
Heat dissipation (worst case)	DC power supply 563 W AC power supply 581 W	N/A
Operating noise	52.6 dBA (5 fan assemblies, 25°C, typical loading)	N/A
MTBF (25°C, 60% CL, Telec)	306,419 hours with DC power supply 327,539 hours with AC power supply	N/A

\* Worst case operational temperature is measured at sea level with at least 4 fan assemblies, with maximum power consumption optics modules (5W QSFP28) fully loaded.

## Power supply specifications (per PSU)

Power supply model	Maximum output power rating (DC)	Input voltage	Input line frequency	Maximum input current	Input line protection	Maximum inrush current
XBR-ACPWR-650-F	650 W	100-240V	50-60Hz	12 A	Fuses	25A
XBR-ACPWR-650-R	650 W	100-240V	50-60Hz	12 A	Fuses	25A
XBR-DCPWR-650-F	650 W	-48 - -60V	-	14 A	Fuses	25A
XBR-DCPWR-650-R	650 W	-48 - -60V	-	13.3 A	Fuses	25A

## Power consumption (typical configuration)

All 100-GbE ports are linked up, loading with 10 percent traffic rate. Five fan assemblies. Fans at nominal speed.

@100 VAC Input (Input power ±5%)	@200 VAC Input (Input power ±5%)	@-48VDC	Minimum number of power supplies	Notes
169 W 577 BTU/hr	166 W 566 BTU/hr	168 W 573 BTU/hr	1 x 650 W AC 1 x 650 W DC	1 power supply
178 W 607 BTU/hr	176 W 601 BTU/hr	179 W 611 BTU/hr	1 x 650 W AC 1 x 650 W DC	2 power supplies

## Power consumption (maximum configuration)

All 100-GbE ports are linked up, loading with 100 percent traffic rate. Two power supplies and five fan assemblies. Fans at high speed.

@100 VAC Input (Input power ±5%)	@200 VAC Input (Input power ±5%)	@-48VDC	Minimum number of power supplies	Notes
570 W 1,945 BTU/hr	544.1 W 1,857 BTU/hr	552 W 1,884 BTU/hr	1 x 650 W AC 1 x 650 W DC	1 power supply
581.2 W 1,983 BTU/hr	562.4 W 1,919 BTU/hr	563 W 1,921 BTU/hr	1 x 650 W AC 1 x 650 W DC	2 power supplies

## Data port specifications (Ethernet)

Port type	Number (in module)	Description
100 GbE	32	QSFP28 ports, compatible with LR4 or SR4 optical transceivers, or direct attached copper cable

## Serial port specifications (pinout - mini-USB)

Pin	Signal	Description
1	Reserved	Not used
2	UART0_RX	Debug port (data received by SLX)
3	UART0_TX	Console port (data transmitted by SLX)
4	Reserved	Not used
5	GND	Ground

## Serial port specifications (protocol)

Parameter	Value
Baud	9600
Data bits	8
Parity	None
Stop bits	1
Flow control	None

## Memory specifications

Memory	Type	Size
Main memory	DDR4	16 GB
Boot Flash	NOR Flash	32 MB
SSD	M.2 SATA III (2 slots)	64 GB per slot

## Regulatory compliance (EMC)

- FCC Part 15, Subpart B (Class A)
- EN 55032 (CE mark) (Class A)
- EN 55024 (CE mark) (Immunity) for Information Technology Equipment
- ICES-003 (Canada) (Class A)
- AS/NZ 55032 (Australia/New Zealand) (Class A)
- VCCI (Japan) (Class A)
- EN 300 386
- CNS 13438 (BSMI) (Taiwan) (Class A)
- KN 32 (South Korea) (Class A)
- KN 35 (South Korea) (Class A)
- TCVN 7189 / TCVN 7317 (Vietnam) (Class A)
- EN 61000-3-2



- EN 61000-3-3

## Regulatory compliance (safety)

- CAN/CSA-C22.2 No. 60950/UL 60950 - Safety of Information Technology Equipment
- EN 60825 Safety of Laser Products - Part 1: Equipment Classification, Requirements and User's Guide
- EN 60950/IEC 60950 Safety of Information Technology Equipment

## Regulatory compliance (environmental)

- 2014/35/EU and 2014/30/EU
- 2011/65/EU - Restriction of the use of certain hazardous substance in electrical and electronic equipment (EU RoHS)
- 2012/19/EU - Waste electrical and electronic equipment (EU WEEE)
- 94/62/EC - packaging and packaging waste (EU)
- 2006/66/EC - batteries and accumulators and waste batteries and accumulators (EU battery directive)
- 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (EU REACH)
- Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 - U.S. Conflict Minerals
- 30/2011/TT-BCT - Vietnam circular
- SJ/T 11363-2006 Requirements for Concentration Limits for Certain Hazardous Substances in EIPs (China)
- SJ/T 11364-2006 Marking for the Control of Pollution Caused by EIPs (China)

Regulatory compliance (environmental)