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Brocade ICX 6610 Switch

Technical Specifications

BROCADE

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This document highlights the features and specifications for the Brocade ICX 6610 switch.

System specifications

System component	Description
Enclosure	1U, stackable, standard 19-inch rack compliant or on a flat surface
Power inlet	C14
Power supplies	Up to two internal, redundant, field-replaceable, load-sharing AC or DC power supplies with dedicated system and PoE power
Fans	Two
Cooling	Front to back (reversible)
System architecture	Nonblocking stackable switching

Ethernet

System component	Description
GbE ports	Standard 40 GbE ports
SFP GbE ports	Up to 384 1-GbE and 64 10-GbE ports per stack Up to eight dual-mode 1 GbE/10 GbE SFP/SFP+ ports
Ethernet management port	Console serial RJ-45 management port Out-of-band management Interface (RJ-45 port)

LEDs

System component	Description
Port	Four port status LEDs (flashing green or flashing yellow)
System	Five system status LEDs (flashing green, green, or yellow)
Power	One power status LED (green)

System component	Description
Fan	One fan status LED (green or yellow)

Other

System component	Description
Serial cable	Console serial RJ-45 management port
RJ-45 connector	10/100/1000 Mbps RJ-45 Ethernet port

Weight and physical dimensions

Model	Height	Width	Depth	Weight
ICX 6610-24	4.4 cm 1.7 inches	42.9 cm 16.89 inches	40.64 cm 16 inches	6.35 kg 13.97 lb
ICX 6610-24F	4.4 cm 1.7 inches	42.9 cm 16.89 inches	40.64 cm 16 inches	6.48 kg 14.26 lb
ICX 6610-24P	4.4 cm 1.7 inches	42.9 cm 16.89 inches	40.64 cm 16 inches	7.24 kg 15.93 lb
ICX 6610-48	4.4 cm 1.7 inches	42.9 cm 16.89 inches	40.64 cm 16 inches	6.77 kg 14.90 lb
ICX 6610-48P	4.4 cm 1.7 inches	42.9 cm 16.89 inches	40.64 cm 16 inches	7.55 kg 16.60 lb

Environmental requirements

Condition	Operational	Non-operational
Ambient temperature	0°C to 45°C (32°F to 113°F)	-25º C to 70º C (-13º F to 158° F)
Relative humidity (non-condensing)	10% to 93% at 50°C (120°F)	95% maximum
Altitude (above sea level)	0 to 3000 m (10,000 ft)	0 to 4500 m (15,000 ft)

Condition	Operational	Non-operational
Airflow	Front to back (reversible)	N/A
Operating noise	39.6 dB to 48.7 dB	N/A

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
RPS15-E RPS15-I	250 W	100 - 240 VAC	50/60 Hz	4.0 A - 2.0 A	Line & Neutral Fused	35 A peak for <10 ms, 10 ms - 150 ms <25 A peak, >150 ms the AC input current will be less than the rating of the input fuses and other components within the power supply
RPS16-E RPS16-I	1000 W	100 - 240 VAC	50/60 Hz	11.8 A - 4.9 A	Line & Neutral Fused	35 A peak for <10 ms, 10 ms - 150 ms <25 A peak, >150 ms the AC input current will be less than the rating of the input fuses and other components within the power supply
RPS16DC-E RPS16DC-I	510 W	40 - 60 VDC	N/A	15.5 A	Positive input fused	40 A peak

Power consumption (maximum configuration)

AC and DC power consumption specifications (single and dual PSU and fan, without PoE). AC input power draw is available for one and two PSUs installed, but only one measurement for 100 - 240 VAC. DC input power is measured at -48 VDC.

Model name	@100 VAC input	@200 VAC input	@-48 VDC input	Minimum number of power supplies	Notes
ICX 6610-24F	125 W 427 BTU/hr	N/A	125 W 427 BTU/hr	1	
	145 W 495 BTU/hr	N/A	145 W 495 BTU/hr	2	
ICX 6610-24P ICX 6610-24	120 W 409 BTU/hr	N/A	120 W 409 BTU/hr	1	
	140 W 478 BTU/hr	N/A	140 W 478 BTU/hr	2	
ICX 6610-48P ICX 6610-48	165 W 563 BTU/hr	N/A	120 W 409 BTU/hr	1	
	185 W 631 BTU/hr	N/A	140 W 478 BTU/hr	2	

Data port specifications (Ethernet)

Model	Port type	Number of ports	Description
ICX 6610-24	10/100/1000 Mbps	24	RJ-45 ports
ICX 6610-48	10/100/1000 Mbps	48	RJ-45 ports
ICX 6610-24F	100/1000 Mbps 1/10 GbE 40 Gbps	24 8 4	SFP ports Dual-mode SFP/SFP+ ports QSFP stacking ports
ICX 6610-24P	10/100/1000 (PoE+)	24 (one power supply)	Maximum PoE Class 3 ports Maximum PoE+ ports
ICX 6610-48P	10/100/1000 (PoE+)	48 (one power supply) 48 (two power supplies)	Maximum PoE Class 3 ports Maximum PoE+ ports

Serial port specifications (pinout RJ-45)

Pin	Signal	Description
1	Not supported	N/A
2	Not supported	N/A
3	UART0_TXD	Transmit data
4	GND	Logic ground
5	GND	Logic ground
6	UART0_RXD	Receive data
7	Not supported	N/A
8	Not supported	N/A

Serial port specifications (protocol)

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

Regulatory compliance (EMC)

- FCC Part 15, Subpart B (Class A)
- EN 55022 (CE mark) (Class A)
- EN 55024 (CE mark) (Immunity) for Information Technology Equipment
- ICES-003 (Canada) (Class A)
- AS/NZ 55022 (Australia) (Class A)
- VCCI (Japan) (Class A)
- EN 61000-3-2
- EN 61000-3-3
- EN 61000-6-1

Regulatory compliance (safety)

- CAN/CSA-C22.2 No. 60950-1-07/UL60950-1 - Safety of Information Technology Equipment
- EN 60825-1 Safety of Laser Products - Part 1: Equipment Classification, Requirements and User's Guide
- EN 60825-2 Safety of Laser Products - Part 2: Safety of Optical Fibre Communications Systems
- EN 60950-1, IEC 60950-1 Safety of Information Technology Equipment

Regulatory compliance (environmental)

- 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)
- NEBS-compliant