

53-1003425-01  
21 October 2014



# Brocade 300

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## Technical Specifications

**BROCADE**

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# Contents

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**Brocade 300 Technical Specifications.....5**



# Brocade 300 Technical Specifications

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The Brocade 300 is a cost-effective and highly-scalable 1, 2, 4, or 8 Gbps switch, designed for small to mid-sized businesses. The Brocade 300 is a dual purpose device that you can use either as a full-functioned switch or as an N\_Port ID Virtualization (NPIV) access gateway. When functioning as an access gateway, the Brocade 300 provides a single platform for all SAN connectivity.

## System specifications

System component	Description
Enclosure	1U, 19-inch EIA-compliant
Power inlet	C13; power from port side
Power supplies	Single, fixed power supply
Fans	Three built-in fans
Cooling	Non-port to port side airflow
System architecture	Nonblocking shared memory switch
System processors	Power PC 440EPx, 667 MHz CPU

## Fibre Channel

System component	Description
Fibre Channel ports	Switch mode (default): 8-, 16-, and 24-port configurations (8-port increments through Ports on Demand [PoD] licenses); E, F, M, and FL_Ports Brocade Access Gateway default port mapping: 16 F_Ports, 8 N_Ports
ANSI Fibre Channel protocol	Fibre Channel Physical and Signaling Interface standard (FC-PH)
Modes of operation	Fibre Channel Class 2, Class 3, Class F
Fabric initialization	Complies with FC-SW-2 6.6
FCIP (IP over Fibre Channel)	Complies with FC-IP 2.3 of FCA profile

## Ethernet

System component	Description
Ethernet management port	RJ-45

## LEDs

System component	Description
Switch status and management	One system status LED (above) on the left side One power status LED (below) on the left side Two Ethernet port status LEDs, one for speed and one for link status 24 port status LEDs, one for each port, located above the ports

## Other

System component	Description
Serial cable	RJ-45 connector cable
RJ-45 connector	10/100 Ethernet management port; in-band over Fibre Channel; serial port (RJ-45)

## Weight and physical dimensions

Model	Height	Width	Depth	Weight
Brocade 300	4.29 cm	42.88 cm	30.66 cm	4.2 kg
	1.69 inches	16.88 inches	12.07 inches	9.30 lb

## Environmental requirements

Condition	Operational	Non-operational
Ambient temperature	-10°C to 40°C (14°F to 104°F)	-25°C to 70°C (-13°F to 158°F)
Relative humidity (non-condensing)	10% to 85% at 40°C (104°F), with maximum gradient of 10% per hour	10% to 90% at 70°C (158°F)

Condition	Operational	Non-operational
Altitude (above sea level)	0 to 3000 m (10,000 feet)	0 to 12000 m (39,000 feet)
Shock	20 G, 6 ms, half-sine wave	33 G, 11 ms, half-sine wave, 3/eg Axis
Vibration	0.5 G sine, 0.4 gms random, 5-500 Hz	2.0 G sine, 1.1 gms random, 5-500 Hz
Airflow	Maximum: 39.1 cmh (23 cfm) Nominal: 30.6 cmh (18 cfm)	N/A
Heat dissipation	195 BTU/hr	N/A
Operating noise	46.7 dB	N/A

## Power supply specifications (per PSU)

Power supply model	Maximum output power rating (DC)	Input voltage	Input line frequency	Maximum input current	Maximum inrush current
Not available separately	75 W	100 - 240 VAC (nominal) 85 - 264 VAC (range)	50/60 Hz (nominal) 47 - 63 Hz (range)	2.0 A	21.5 A

## Power consumption

Nominal 48 watts; maximum 57 watts with 24 ports at 8 Gbps.

## Data port specifications (Fibre Channel)

Name	Number	Description
Brocade 300	24	Switch mode (default): 8-, 16-, and 24-port configurations (8-port increments through Ports on Demand [PoD] licenses); E_, F_, M_, and FL_Ports. Brocade Access Gateway default port mapping: 16 F_Ports, 8 N_Ports.

## Fibre Channel data transmission ranges

Port speed (Gbps)	Cable size (microns)	Short wavelength (SWL)	Long wavelength (LWL)	Extended long wavelength (ELWL)
1	50	500 m (1,640 ft) (OM2)	N/A	N/A
		860 m (2,821 ft) (OM3)		
	62.5	300 m (984 ft)	N/A	N/A
2	50	300 m (984 ft) (OM2)	N/A	N/A
		500 m (1,640 ft) (OM3)		
	62.5	150 m (492 ft)	N/A	N/A
4	50	150 m (492 ft) (OM2)	N/A	N/A
		380 m (1,246 ft) (OM3)		
	62.5	70 m (230 ft)	N/A	N/A
8	50	50 m (164 ft) (OM2)	N/A	N/A
		150 m (492 ft) (OM3)		
	62.5	21 m (69 ft)	N/A	N/A
9	50	N/A	10 km (6.2 miles)	40 km (24.8 miles)
		62.5	N/A	N/A
	9	N/A	N/A	40 km (24.8 miles)
9	50	150 m (492 ft) (OM2)	N/A	N/A
		380 m (1,246 ft) (OM3)		
	62.5	70 m (230 ft)	N/A	N/A
9	50	50 m (164 ft) (OM2)	N/A	N/A
		150 m (492 ft) (OM3)		
	62.5	21 m (69 ft)	N/A	N/A
9	50	N/A	10 km (6.2 miles)	N/A
		62.5	N/A	N/A
	9	N/A	N/A	10 km (6.2 miles)

## Serial port specifications (pinout RJ-45)

Pin	Signal	Description
1	Not supported	N/A
2	Not supported	N/A
3	UART1_TXD	Transmit data
4	GND	Logic ground



Pin	Signal	Description
5	GND	Logic ground
6	UART1_RXD	Receive data
7	Not supported	N/A
8	Not supported	N/A

## Serial port specifications (protocol)

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

## Memory specifications

Memory	Type	Size
Main	SDRAM	512 MB
Compact Flash		1 GB

## Regulatory compliance (EMC)

- ANSI C63.4
- ICES-003 Class A
- CISPR22 and JEIDA (Harmonics)
- EN55022 and EN55024
- EN55022 or CISPR22 or AS/NZS CISPR22
- 51318.22-99 and 51318.24.99
- KN22 and KN24
- FCC Class A and Statement
- ICES A and Statement
- VCCI-A and Statement
- CE marking

- C-Tick mark
- GOST mark
- MIC mark Class A
- EN50082-2/EN55024:1998

## **Regulatory compliance (safety)**

- Bi-Nat UL/CSA 60950-11st Ed
- EN60950-1
- IEC60950-1
- cCSAus
- TUV-GS, N
- "S" mark
- GOST mark

## **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)