CISCO Switch Catalyst 6500 Series Datasheet

Router-Switch.com
Leading Network Hardware Supplier

CONTENT

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OVERVIEW

Cisco introduces the Cisco® Catalyst® 6500 Enhanced Series Chassis (6500-E Series) delivering up to 2 terabits per second of system bandwidth capacity and 80 Gbps of per-slot bandwidth. In a system configured for VSS, this translates to a system capacity of 4 Tbps. The Cisco® Catalyst® 6500 Enhanced Series Chassis will be capable of delivering up to 180 Gbps of per-slot bandwidth with a system capacity of up to 4 terabits per second. A system configured for VSS will be capable of delivering up to 8 Tbps of system bandwidth.

The Cisco Catalyst 6500-E Series Switch offers the broadest range of interface modules with industry-leading performance and advanced feature integration. The Cisco Catalyst 6500-E Series Switch also offers high port densities and comes in 3-, 4-, 6-, 9, 9-Vertical, and 13-slot versions that make it ideal for a range of deployment scenarios.

The Cisco Catalyst 6500-E Series Chassis provides superior investment protection by supporting multiple generations of products in the same chassis, lowering the total cost of ownership. The Cisco Catalyst 6500-E Series Chassis supports all the Cisco Catalyst 6500 Supervisor Engines up to and including the Cisco Catalyst 6500 Series Supervisor Engine 2T, and associated LAN, WAN, and services modules.

APPEARANCE

Figure 1. Cisco Catalyst 6500-E Series Chassis

KEY FEATURES AND BENEFITS

Feature	Benefit
Scalability	
3, 4, 6, 9, 9-V and 13-slot modular chassis	Allows flexibility and room for future growth
Delivers up to 2 terabits per second of system bandwidth capacity and 80 Gbps per-slot for all slots. A system configured for VSS has a system capacity of 4 terabits per second. Capable of delivering up to 4 terabits per second of system bandwidth and 180Gbps of per-slot bandwidth. A system configured for VSS will be capable of delivering up to 8 Tbps of system capacity.	Scales the system capacity for future needs
High interface capacity	Scales to high-density 40 Gigabit Ethernet, 10 Gigabit Ethernet and Gigabit Ethernet configurations
Increased resiliency	
Standby fabric hot sync	Decreases the supervisor engine switchover time of Supervisor Engine 720 and Supervisor Engine 2T based systems to between 50 and 200 ms, depending on the modules being used
Redundant control channel	Increases resiliency to protect against backplane control channel failures
Redundant supervisor engine option	Increases availability with redundant supervisor engine options

Redundant power supply option	Supports redundant power supplies for increased availability
Fan tray	Supports hot-swappable fan tray The 6509-V-E provides for redundant, hot-swappable fan trays
Environmental	
Side-to-side airflow (except Cisco Catalyst 6509-V-E)	Allows ease of access to ports and cables 6509-V-E has front-to-back air flow to support hot aisle or cold aisle designs
AC and DC power supply	Supports both AC and DC power supply options, including AC and DC mixing
Network Equipment Building Standards Layer 3 (NEBS L3) compliant	Supports NEBS L3 compliance for deployment in demanding environments

PRODUCT SPECIFICATIONS OF CISCO CATALYST 6500-E SERIES SWITCH

Physical Specifications of Cisco Catalyst 6500-E Series Chassis

	6503-E	6504-E	6506-E	6509-E	6509-V-E	6513-E
Number of Slots	3	4	6	9	9	13
Supervisor Compatibility	Cisco Catalyst 6500 Series Supervisor Engine 32 Cisco Catalyst 6500 Series Supervisor Engine 720-3B Cisco Catalyst 6500 Series Supervisor Engine 720-3BXL Cisco Catalyst 6500 Series Supervisor Engine 720-10G-3C					

			Cisco Catalyst 6500 Series Supervisor Engine 720-10G-3CXL Cisco Catalyst 6500 Series Supervisor Engine 2T			
Power Supply Compatibility *** Indicates EoS Power Supply**	AC: 1400W, 950W* DC: 950W*	AC: 2700W DC: 2700W	AC: 2500W*, 3000W, 4000W, 6000W, 8700W DC: 2500W, 4000W, 6000W	AC: 2500W*, 3000W, 4000W, 6000W, 8700W DC: 2500W, 4000W, 6000W	AC: 2500W*, 3000W, 4000W, 6000W, 8700W DC: 2500W, 4000W, 6000W	AC: 3000W, 4000W, 6000W, 8700W DC: 2500W, 4000W, 6000W
Module Compatibility			All modules based on the software release in the system			
Software Compatibility (Minimum Software Version)						
With Supervisor Engine 32	● 12.2(18)SXF	● 12.2(18)SXF	● 12.2(18)SXF	● 12.2(18)SXF	● 12.2(18)SXF10	● 12.2(33)SXI1 ● 12.2(33)SXH2 ● 12.2(18)SXF14
With Supervisor Engine 720	● 12.2(14)SX	● 12.2(18)SXE	● 12.2(14)SX	● 12.2(14)SX	● 12.2(18)SXF10	● 12.2(33)SXI1 ● 12.2(33)SXH2 ● 12.2(18)SXF14

With Supervisor Engine 720-10 GE	● 12.2(33)SXH	● 12.2(33)SXH	● 12.2(33)SXH	● 12.2(33)SXH	● 12.2(33)SXH	● 12.2(33)SXI1 ● 12.2(33)SXH2
With Supervisor Engine 2T-10 GE	● 15.0(1)SY	● 15.0(1)SY	● 15.0(1)SY	● 15.0(1)SY	● 15.0(1)SY	● 15.0(1)SY
Reliability and Availability **Calculated Mean Time Between Failure (MTBF)**	860,868	677,643	441,418	348,935	330,888	311,778
MIBS	Check the corresponding supervisor engine data sheet					
Network Management	Check the corresponding supervisor engine data sheet					
Physical Dimensions						
Inches	7 x 17.37 x 21.75	8.75 x 17.5 x 21.75	19.2 x 17.5 x 18	24.5 x 17.5 x 18.2	36.65 x 17.2 x 20.7	32.7 x 17.3 x 18.1
Centimeters	17.8 x 44.1 x 55.2	22.2 x 44.45 x 55.25	48.8 x 44.5 x 46.0	62.2 x 44.5 x 46.0	93.3 x 43.1 x 53.3	83.0 x 43.9 x 46

Rack Units (RU)	4	5	11	14	21	19
Weight						
Chassis Only (lbs)	● 16A at 100 VAC ● 7A at 240 VAC	● 16A at 200 VAC	● Two 12A at 100 VAC Or ● Two 12A at 200 VAC	● Two 12A at 100 VAC Or ● Two 16A at 200 VAC	● Three 12A at 100 VAC Or ● Three 16A at 200 VAC	● 31A at -60 VDC (data only) ● 180A at -48 VDC (PoE)
Fully Configured (lbs)	33	40	50	60	121	102
Fully Configured (lbs)	85.4	97	159	190	270	280
Input Voltage				100 to 240 VAC -48 to -60 VDC		
Safety				UL 60950 Second Edition CAN/CSA-C22.2 No. 60950 Second Edition EN 60950 Second Edition IEC 60950 Second Edition AS/NZS 60950		
EMC				FCC Part 15 (CFR 47) Class A		

	VCCI Class A EN55022 Class A CISPR 22 Class A CE marking AS/NZS 3548 Class A ETS300 386 EN55024 EN61000-6-1 EN50082-1
NEBS/ETSI	GR-1089-Core NEBS Level 3 ETS 300 019 Storage Class 1.1 ETS 300 019 Transportation Class 2.3 ETS 300 019 Stationary Use Class 3.1
ATIS Pb free and Energy Efficiency	ATIS-0600020.2010 Pb Free circuit packs ATIS-0600015-2009 General Energy Efficiency Requirements (TEER) ATIS-0600015.03-2009 Switch and Router Energy Efficiency ATIS-0600015.01-2009 Server Energy Efficiency VZ.TPR.9205 Verizon Energy Efficiency Requirements for Telecommunication Equipment (TEEER)
Operating Environment	

Operating Temperature	32°F to 104°F (0 to 40°C)
Storage Temperature	-4 to 149°F (-20 to 65°C)
Thermal Transition	0.5°C per minute (hot to cold) 0. 33°C per minute (cold to hot)
Relative Humidity	Ambient (noncondensing) operating: 5% to 90% Ambient (noncondensing) nonoperating and storage: 5% to 95%
Operating Altitude	Certified for operation: 0 to 6500 ft (0 to 2000 m) Designed and tested for operation: -200 to 10,000 ft (-60 to 3000 m)

CISCO 4500 BASIC ORDERING INFORMATION

Part Number	Product Name
WS-C6503-E	Cisco Catalyst 6503 Enhanced Chassis
WS-C6503-E=	Cisco Catalyst 6503 Enhanced Chassis Spare
WS-C6503-E-FAN=	Cisco Catalyst 6503 Enhanced Chassis Fan Tray Spare
WS-C6504-E	Cisco Catalyst 6504 Enhanced Chassis
WS-C6504-E=	Cisco Catalyst 6504 Enhanced Chassis Spare
WS-C6504-E-FAN=	Cisco Catalyst 6504 Enhanced Chassis Fan Tray Spare
WS-C6506-E	Cisco Catalyst 6506 Enhanced Chassis

WS-C6506-E=	Cisco Catalyst 6506 Enhanced Chassis Spare
WS-C6506-E-FAN=	Cisco Catalyst 6506 Enhanced Chassis Fan Tray Spare
WS-C6509-E	Cisco Catalyst 6509 Enhanced Chassis
WS-C6509-E=	Cisco Catalyst 6509 Enhanced Chassis Spare
WS-C6509-E-FAN=	Cisco Catalyst 6509 Enhanced Chassis Fan Tray Spare
WS-C6509-V-E	Cisco Catalyst 6509 Vertical Enhanced Chassis
WS-C6509-V-E=	Cisco Catalyst 6509 Vertical Enhanced Chassis Spare
WS-C6509-V-E-FAN=	Cisco Catalyst 6509 Vertical Enhanced Chassis Fan Tray Spare
WS-C6513-E	Cisco Catalyst 6513 Enhanced Chassis
WS-C6513-E=	Cisco Catalyst 6513 Enhanced Chassis Spare
WS-C6513-E-FAN=	Cisco Catalyst 6513 Enhanced Chassis Fan Tray Spare
PWR-1400-AC=	Cisco Catalyst 6500 1400 W AC Power Supply
PWR-2700-AC/4=	Cisco Catalyst 6500 2700W AC Power Supply
WS-CAC-3000W=	Cisco Catalyst 6500 3000W AC Power Supply
WS-CAC-6000W=	Cisco Catalyst 6500 6000W AC Power Supply
WS-CAC-8700W-E=	Cisco Catalyst 6500 8700W Enhanced AC Power Supply
WS-CAC-4000W-INT=	Cisco Catalyst 6500 4000W AC Power Supply for US
WS-CAC-4000W-INT=	Cisco Catalyst 6500 4000W AC Power Supply for International
WS-CDC-2500W=	Cisco Catalyst 6500 2500W DC Power Supply

PWR-2700-DC/4=	Cisco Catalyst 6500 2700W DC Power Supply
PWR-4000-DC=	Cisco Catalyst 6500 4000W DC Power Supply
PWR-6000-DC=	Cisco Catalyst 6500 6000W DC Power Supply

SOURCES

https://www.cisco.com/c/en/us/products/collateral/switches/catalyst-6500-series-switches/data_sheet_c78-708665.html