

System Specifications

The Catalyst 5000 series switch system specifications are described in Table A-1.

Table A-1 System Specifications

Description	Specifications
Backplane	1.2-Gbps ¹ , 5 module connections
Dimensions (H x W x D)	10.4 x 17.25 x 18.4" (26.4 x 43.1 x 46.0 cm) Chassis depth including cable guide is 21.64" (55.0 cm)
Weight	Chassis only: 43 lb (19.5 kg) Chassis fully configured with 1 supervisor engine module, 4 switching modules, and 2 power supplies: 84 lb (39 kg)
DC voltages supplied and steady-state maximum current ratings	+5V @ 70A +12V @ 2A +24V @ 0.2A
Power supply	376W maximum (AC-input power supplies)
Power dissipation	350W maximum configuration, 110W typical with maximum configuration
Heat dissipation	563W (1919 Btu ² /hr)
Input voltage	100–240 VAC wide input with power factor corrector
Frequency	47–63 Hz autoranging
AC current rating	8A maximum at 100–127 VAC, 4A maximum at 200–240 VAC with the chassis fully configured. A maximum of 0.8 kva.
Airflow	95 cfm ³ through the system fan assembly
Operating temperature	32–104 F (0–40 C)

Description	Specifications
Nonoperating temperature	-40–167 F (-40–75 C)
Humidity	10–90%, noncondensing
Microprocessor	25-MHz 68EC040 for the NMP ⁴
Memory	4 MB of Flash memory 8MB of packet-buffer DRAM ⁵ 256 KB of NVRAM ⁶
Interface ports	4 RJ-21 IEEE 802.3 Group Switching Ethernet 10BaseT (WS-X5020) 2 RJ-21 IEEE 802.3 Ethernet 10BaseT (WS-X5010) 12 ST multimode 802.3 Ethernet 10BaseFL (WS-X5011) 12 RJ-45 IEEE 802.3u Fast Ethernet 10/100 BaseTX (WS-X5213) and 100BaseTX (WS-X5113) 2 RJ-45 IEEE 802.3u Fast Ethernet 100BaseTX on supervisor engine module 2 40-pin MII ⁷ IEEE 802.3u Fast Ethernet 100BaseTX MII and a DB-25 console port for an administration workstation on supervisor engine module (WS-C5009) 12 RJ-45 IEEE 802.3u Ethernet 12 SC multimode 802.3u Fast Ethernet 100BaseFX (WS-X5111) 1 SC ATM (WS-X5154 and WS-X5155) 1 RJ-45 ATM (WS-X5153) 2 RJ-45 A/B CDDI ports (WS-X5103) 2 ST A/B FDDI singlemode ports, ST connectors (WS-X5104) with optical bypass switch: 6-pin mini-DIN 2 MIC A/B FDDI multimode ports, MIC connectors (WS-X5101) with optical bypass switch: 6-pin mini-DIN
Network management	SNMP ⁸ agent Station Management (SMT) Specification, Revision 7.3

Description	Specifications	Flash Download:
Minimum Software Version Requirements for Modules	Module: Group Switching Ethernet Module (10BaseT 48 Port)	Release 2.1 or above
	ATM LAN Emulation Module (UTP) or ATM LAN Emulation Module (Single-Mode and Multimode Fiber)	Release 1.5 or above
	CDDI Module (UTP)	Release 1.4 or above
	FDDI Module MMF (Multimode Fiber) or FDDI Module SMF (Single-Mode Fiber)	Release 1.4 or above
Management Information Bases (MIB)	SNMP v1 (RFC 1155-1157) SNMP MIB II (RFC 1213) Bridge MIB (RFC 1493) FDDI MIB, SMT 7.3 (RFC 1512) RFC 1516 (SNMP-REPEATER-MIB) Interface extension MIB (RFC 1573) Ethernet (RFC 1643) RFC 1757 (RMON MIB) CISCO-CDP-MIB Cisco Stack MIB CISCO-VTP-MIB	
ATM LAN Emulation Module Optical Specifications:	Transmitter output power: -14 to -8 dBm Receiver sensitivity: -32.5 to -8 dBm Wavelength: 1261 to 1360 nm Optical source: Laser Maximum span: 10 km	
Multimode Fiber	Transmitter output power: -19 to -14 dBm Receiver sensitivity: -32.5 to -14 dBm Wavelength: 1270 to 1380 nm Optical source: LED Maximum span: 2 km	

Description	Specifications
FDDI Frame processing	IP Fragmentation (RFC 791) Translation (802.1h, 802.1i) Transparent bridging (802.1d)
Maximum station-to-station cabling distance	Fiber-optic supervisor engine module: Multimode: 1.2 miles (2 km), full-duplex; 121 feet (400 meters), half-duplex Single-mode: 9.3 miles (15 km), half- and full-duplex 10BaseFL, FDDI, and ATM 62.5/125-micron multimode fiber: 1.24 miles (2 km) 10BaseT Ethernet: Category 3-5 UTP ¹ : 328' (100 m), 100 ohn STP: 238' (100 m) 10/100BaseTX Fast Ethernet: Category 5 UTP: 328' (100 m) 100BaseTX Fast Ethernet: Category 5 UTP: 328' (100 m) 100BaseFX Fast Ethernet 62.5/125-micron multimode fiber: 0.25 miles (400 m) half duplex 100BaseFX Fast Ethernet 62.5/125-micron multimode fiber: 1.24 miles (2 km) full duplex CDDI: Category 5 UTP: 328' (100 m) FDDI and ATM: 50/125-micron multimode fiber: 1.24 miles (2 km) FDDI: 8/125-micron single-mode fiber: 18.6 miles (32 km) ATM UTP: Category 5 UTP: 328' (100 m) ATM 8/125-micron single-mode fiber: 6.22 miles (10 km)
FDDI transmit power levels: Single-mode fiber	Average optical power: Maximum: -4.0 dBm ⁹ Minimum: -7.0 dBm
Multimode fiber	Maximum: -14.0 dBm Minimum: -18.5 dBm
FDDI receive power levels: Single-mode fiber	Average optical sensitivity: -33 dBm Average maximum input power: -14 dBm
Multimode fiber	Average optical sensitivity: -34 dBm Average maximum input power: -14 dBm
Agency approvals	Safety: UL ¹⁰ 1950, CSA ¹¹ -C22.2 No. 950-93, and EN60950 EMI ¹² : FCC Class A (47 CFR, Part 15), CE Mark, EN55022 Class B and VCCI Class 2 with shielded UTP cables

-
1. Gbps = gigabits per second
 2. Btu = British thermal units
 3. cfm = cubic feet per minute
 4. NMP = network management processor
 5. DRAM = dynamic random-access memory
 6. NVRAM = nonvolatile random-access memory
 7. MII = media independent interface
 8. SNMP = Simple Network Management Protocol
 9. dBm = decibels per milliwatt
 10. UL = Underwriters Laboratory
 11. CSA = Canadian Standards Association
 12. EMI = electromagnetic interference

