



WS-C3850-24XS-S Datasheet

Overview

Cisco next generation Catalyst WS-C3850-24XS-S is stackable enterprise level switch and integrated with 24 ports of SFP+ 10G Ethernet fiber connection with Flexible Netflow feature.

Quick Specs

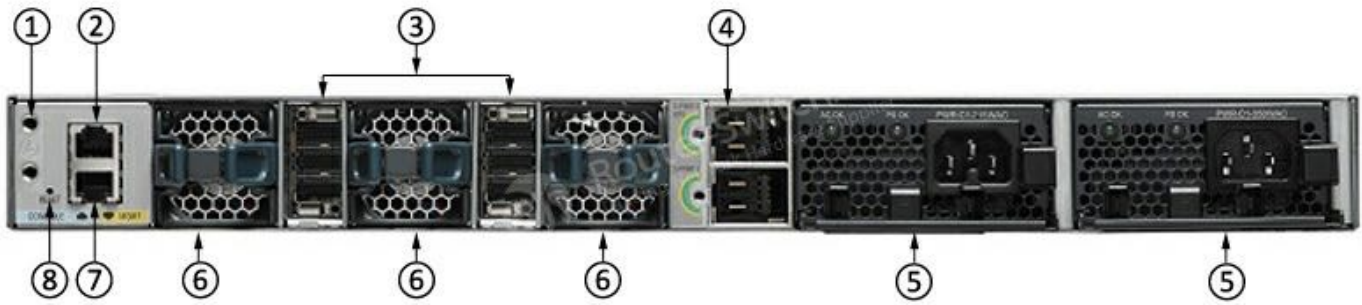
Table 1 shows the Quick Specs.

Product Code	WS-C3850-24XS-S
Enclosure Type	1 RU
Feature Set	IP Base
Network SFP uplink module selection	C3850-NM-4-10G C3850-NM-8-10G C3850-NM-2-40G
Ports	24 × 10/100/1000 10G SFP+ Optical ports
Maximum stacking number	9
Stack bandwidth	480 Gpbs
RAM	4 GB
Flash Memory	4 GB
Dimensions (WDH)	44.5 cm x 45 cm x 4.45 cm

Product Details

Note:

(1)	UID (blue beacon)	(5)	USB Type A storage port
(2)	Mode button	(6)	24 × 10/100/1000 10G SFP+ Optical ports
(3)	Status LEDs	(7)	Network SFP uplink module slot



Note

(1)	Ground connector	(5)	Power supply modules
(2)	CONSOLE (RJ-45 console port)	(6)	Fan module
(3)	StackWise port connector	(7)	MGMT port
(4)	StackPower connector	(8)	Reset Button

Figure 3 shows the StackWise-480 and StackPower connectors.

This switch with IP Base feature set can only stack with other Catalyst 3850 Series IP Base switches.



The Modules, Licenses and Accessories

Table 2 shows some recommended modules, licenses and accessories of this switch.

Models	Description
C3850-NM-4-10G	Cisco 3850 Series Network Module C3850-NM-4-10G 4 x 10GE Network Module
C3850-NM-8-10G	Cisco 3850 Series Network Module C3850-NM-8-10G 8 x 10GE Network Module
L-C3850-24-S-E	C3850-24 IP Base to IP Services Electronic RTU License
PWR-C1-715WAC=	Cisco 3850 Series Power Supply PWR-C1-715WAC 715W AC Config 1 Power Supply
STACK-T1-50CM=	Cisco StackWise-480 50cm stacking cable for Cisco Catalyst 3850 series switch
STACK-T1-1M=	Cisco StackWise-480 1m stacking cable for Cisco Catalyst 3850 series switch

Models	WS-C3850-24XS-S	WS-C3850-24S-S
Feature Set	IP Base	IP Base
Ports	24 x 10/100/1000 10G SFP+ Optical ports	24 x 10/100/1000 SFP Optical ports
Network SFP uplink module selection	C3850-NM-4-10G C3850-NM-8-10G C3850-NM-2-40G	C3850-NM-4-1G C3850-NM-2-10G

Switch to Something New

[Why Upgrade to Catalyst 9300?](#) | [See the Catalyst 9300 Series](#)

Specification

WS-C3850-24XS-S Specification	
model info:	WS-C3850-24XS-S
enclosure type	Rack-mountable - 1U
Ports	24 x SFP+ ports
Network management Interface	<ul style="list-style-type: none"> ● Ethernet management port: RJ-45 connectors, 4-pair Cat-5 UTP cabling ● Management console port: RJ-45-to-DB9 cable for PC connections
Available PoE Power	None
Switching Capacity	320Gbps
Maximum stacking number	up to 9 switches with same IOS feature set in same series
Stack Bandwidth	480Gbps
Forwarding Performance	454.55Mpps
FNF entries	48,000 flows
Maximum VLANs IDs	1,000
MAC Address Table Size	32K
CPU	Multicore CPU
RAM	4 G
Flash Memory	4 G
Wireless	
Number of AP per switch/stack	100
Number of wireless clients per switch/stack	2000
Total number of WLANs per switch	64

Supported Aironet AP series	3600, 3500, 2600, 1600, 1260, 1140, 1040
Expansion / Connectivity	
Console ports	USB (Type-B), Ethernet (RJ-45)
Expansion Slot(s)	1 network module slot and 1 power redundant slot
Network Modules Selection	<ul style="list-style-type: none"> ● C3850-NM-4-1G: 4 x 1G uplinks network module ● C3850-NM-2-10G: 2 x 10G or 4 x 1G uplinks network module
Stacking cable	<ul style="list-style-type: none"> ● STACK-T1-50CM StackWise stacking cable with a 0.5 m length ● STACK-T1-1M StackWise stacking cable with a 1.0 m length ● STACK-T1-3M StackWise stacking cable with a 3.0 m length
Stack Power Cable (recommended)	<ul style="list-style-type: none"> ● CAB-SPWR-30CM stack power cable with a 30CM length ● CAB-SPWR-150CM stack power cable with a 150CM length
Power supply	PWR-C1-715WAC
Power Device	Power supply - redundant - plug-in module
Power Redundancy	optional
Voltage range (Auto)	100V-240V
Power Consumption of standalone(in Watts)	205.5 (Max)
Miscellaneous	
Width	17.5 Inches (44.5 cm)
Depth	17.7 Inches (45.0 cm)
Height	1.75 Inches (4.45 cm)
Weight	13.5 Pounds (6.1 Kg)
Rack Mounting Kit	optional
MTBF in hours	307,990
Compliant Standards	<ul style="list-style-type: none"> ● IEEE 802.1D Spanning Tree Protocol ● IEEE 802.1p CoS Prioritization ● IEEE 802.1Q VLAN ● IEEE 802.1s ● IEEE 802.1w ● IEEE 802.1X ● IEEE 802.1X-Rev ● IEEE 802.11 ● IEEE 802.1ab (LLDP) ● IEEE 802.3ad ● IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports ● IEEE 802.3 10BASE-T ● IEEE 802.3u 100BASE-TX ● IEEE 802.3ab 1000BASE-T ● IEEE 802.3z 1000BASE-X ● RMON I and II standards ● SNMP v1, v2c, and v3
System software / license	
System software	IOS IP Base (Upgradable)
EnergyWise license	ENERGY-MGMT, ENERGY-MGT-100-K9
Software license	<ul style="list-style-type: none"> ● C3850-24-S-E: IP Base to IP Services RTU paper license ● L-C3850-24-S-E: IP Base to IP Services RTU electronic license

<p>Access Point Licenses</p>	<ul style="list-style-type: none"> ●LIC-CT3850-UPG: Primary upgrade license SKU for Cisco 3850 wireless controller (paper license) ●LIC-CTIOS-1A: 1 access point adder license for the Cisco IOS Software based wireless controller (paper license)
<p>Features</p>	<ul style="list-style-type: none"> ●RPS Support ● Jumbo Frames ● VLANS ●Voice Vlan ●VTPv2 ●CDPv2 ●LLDP ● 802.3ad LACP and PAgP ● PVST/PVST+ ● 802.1W/802.1S ●Port Fast/Uplink Fast ●Dynamic Trunking Protocol (DTP) ● port CoS Trust and Override ● Trusted Boundary ● ACL Classification ●Ingress Policing ● Auto QoS ● Per VLAN policies ● 802.1p queues ● Scheduling ● Priority Queuing ● Configure CoS Priority Queues ●Configure CoS Priority Queues ● Configure Queue Weights ● Configure Buffers and Thresholds ●Class & Policy Maps ● Modify CoS and DSCP Mapping ● Weighted Tail Drop ● IGMPv1,v2,v3 and MLDv1, v2 ● DHCP server ● DSCP transparency ● HSRP, VRRP, BGP ● RIPv1, v2 EIGRP, PIM OSPF, OSPFv3, EIGRPv6, BGPv4, IS-ISv4 ● VRF-lite ● PIM-SM/DM, PIM sparse-dense mode, SSM ● Flexible Netflow
<p>Advanced Network security</p>	<ul style="list-style-type: none"> ● Port security ● DHCP snooping ●Dynamic ARP inspection (DAI) ● IP source guard ●The Unicast Reverse Path Forwarding (uRPF) ● Bidirectional data support on a SPAN ● User authentication ● Private VLAN ●Router and VLAN ACLs ● complete identity and security ● Multidomain authentication ● MAC address notification ● IGMP filtering ● Cisco security VLAN ACL ● Secure Shell (SSH) Protocol, Kerberos, and Simple Network Management Protocol Version 3 (SNMPv3) ● Port-based ACLs ● TrustSec SXP ● IEEE 802.1ae ● TACACS+ and RADIUS authentication ● Cisco standard and extended IP security router ACLs ● Bridge protocol data unit (BPDU) Guard ● Spanning Tree Root Guard (STRG) ● Wireless end-to-end security

Management	<ul style="list-style-type: none"> ● CISCO-BULK-FILE-MIB ● CISCO-CABLE-DIAG-MIB ● CISCO-CALLHOME-MIB ● CISCO-CEF-MIB ● CISCO-CIRCUIT-INTERFACE-MIB ● CISCO-ENTITY-VENDORTYPE-OID-MIB ● CISCO-CONTEXT-MAPPING-MIB ● CISCO-DEVICE-LOCATION-MIB ● CISCO-DHCP-SNOOPING-MIB ● CISCO-EIGRP-MIB ● CISCO-EMBEDDED-EVENT-MGR-MIB ● CISCO-ENTITY-FRU-CONTROL-MIB ● CISCO-ENTITY-SENSOR-MIB ● ENTITY-MIB ● CISCO-ERR-DISABLE-MIB ● CISCO-CONFIG-COPY-MIB ● CISCO-FLOW-MONITOR-MIB ● CISCO-FTP-CLIENT-MIB ● CISCO-HSRP-EXT-MIB ● CISCO-HSRP-MIB ● CISCO-IETF-ISIS-MIB ● CISCO-IF-EXTENSION-MIB ● CISCO-IGMP-FILTER-MIB ● CISCO-CONFIG-MAN-MIB ● CISCO-IP-CBR-METRICS-MIB ● CISCO-IPMROUTE-MIB ● CISCO-IP-STAT-MIB ● CISCO-IP-URPF-MIB ● CISCO-L2L3-INTERFACE-CONFIG-MIB ● CISCO-LAG-MIB ● CISCO-LICENSE-MGMT-MIB ● CISCO-MAC-AUTH-BYPASS-MIB ● CISCO-MAC-NOTIFICATION-MIB ● CISCO-MDI-METRICS-MIB ● CISCO-FLASH-MIB ● CISCO-OSPF-MIB ● CISCO-OSPF-TRAP-MIB ● CISCO-PAE-MIB ● CISCO-PAGP-MIB ● CISCO-PIM-MIB ● CISCO-PING-MIB ● CISCO-PORT-QOS-MIB ● CISCO-PORT-SECURITY-MIB ● CISCO-PORT-STORM-CONTROL-MIB ● CISCO-POWER-ETHERNET-EXT-MIB ● CISCO-PRIVATE-VLAN-MIB ● CISCO-PROCESS-MIB ● CISCO-PRODUCTS-MIB ● CISCO-RF-MIB ● CISCO-RTP-METRICS-MIB ● CISCO-RTTMON-MIB ● CISCO-SMART-INSTALL-MIB ● CISCO-SNMP-TARGET-EXT-MIB ● CISCO-STACKMAKER-MIB ● CISCO-MEMORY-POOL-MIB ● CISCO-STP-EXTENSIONS-MIB ● CISCO-SYSLOG-MIB ● CISCO-TCP-MIB ● CISCO-UDLD-MIB ● CISCO-VLAN-IFTABLE-RELATIONSHIP-MIB ● CISCO-VLAN-MEMBERSHIP-MIB ● CISCO-VTP-MIB ● EtherLike-MIB ● HC-RMON-MIB ● IEEE8021-PAE-MIB ● IEEE8023-LAG-MIB ● IF-MIB ● IGMP-MIB ● IGMP-STD-MIB ● IP-FORWARD-MIB ● IP-MIB ● IPMROUTE-STD-MIB ● LLDP-EXT-MED-MIB ● LLDP-MIB ● NOTIFICATION-LOG-MIB ● OLD-CISCO-MEMORY-MIB ● CISCO-CDP-MIB ● POWER-ETHERNET-MIB ● RMON2-MIB ● RMON-MIB ● SNMP-COMMUNITY-MIB ● SNMP-FRAMEWORK-MIB ● SNMP-MPD-MIB ● SNMP-NOTIFICATION-MIB ● SNMP-PROXY-MIB ● SNMP-TARGET-MIB ● SNMP-USM-MIB ● SNMPv2-MIB ● SNMP-VIEW-BASED-ACM-MIB ● TCP-MIB ● UDP-MIB ● CISCO-IMAGE-MIB ● CISCO-STACKWISE-MIB ● AIRESMACE-WIRELESS-MIB ● CISCO-LWAPP-IDS-MIB ● CISCO-LWAPP-AP-MIB ● CISCO-LWAPP-CCX-RM-MIB ● CISCO-LWAPP-CLIENT-ROAMING-MIB ● CISCO-LWAPP-DOT11-CCX-CLIENT-DIAG-MIB ● CISCO-LWAPP-DOT11-CCX-CLIENT-MIB ● CISCO-LWAPP-DOT11-CLIENT-CCX-REPORTS-MIB ● CISCO-LWAPP-DOT11-CLIENT-MIB ● CISCO-LWAPP-DOT11-MIB ● CISCO-LWAPP-DOWNLOAD-MIB ● CISCO-LWAPP-LINKTEST-MIB ● CISCO-LWAPP-MFP-MIB ● CISCO-LWAPP-MOBILITY-EXT-MIB ● CISCO-LWAPP-QOS-MIB ● CISCO-LWAPP-REAP-MIB ● CISCO-LWAPP-ROGUE-MIB ● CISCO-LWAPP-RRM-MIB ● CISCO-LWAPP-SI-MIB ● CISCO-LWAPP-TSM-MIB ● CISCO-LWAPP-WLAN-MIB ● CISCO-LWAPP-WLAN-SECURITY-MIB
Technical Support and Services	<ul style="list-style-type: none"> ● Cisco SMARTnet Service ● Cisco Smart Foundation Service ● Cisco SP Base Service ● Cisco Focused Technical Support Services

Environmental Ranges

With AC power supply Operating environment and altitude

Operating temperature up to 5000 ft (1500 m)	23°F to 113°F (-5°C to +45°C)
Operating temperature up to 10,000 ft (3000 m)	23°F to 104°F (-5°C to +40°C)
Short-term exception at sealevel with single fan failure	23°F to 113°F (-5°C to +45°C)
Short-term exception up to 5000 feet (1500 m)	23°F to 122°F (-5°C to 50°C)

With DC power supply Operating environment and altitude (NEBS)	
Operating temperature up to 6000 ft (1800 m)	23°F to 113°F (-5°C to +45°C)
Operating temperature up to 10,000 ft (3000 m)	23°F to 104°F (-5°C to +40°C)
Operating temperature up to 13,000 ft (4000m)	23°F to 95°F (-5°C to 35°C)
Short-term exception up to 6,000 feet (1800 m)	23°F to 131°F (-5°C to +55°C)
Short-term exception up to 10,000 feet (3000 m)	23°F to 122°F (-5°C to +50°C)
Short-term exception up to 13,000 feet (4000 m)	23°F to 113°F (-5°C to +45°C)
Short-term exception at sealevel with single fan failure	23°F to 113°F (-5°C to +45°)
Storage environment	-40°F to 160°F (-40°C to 70°C)
Operating altitude	Up to 13,000 Feet (Up to 4000 Meters)
Storage altitude	Up to 15,000 Feet (Up to 4573 Meters)
Operating relative humidity	10% to 95% noncondensing
Storage relative humidity	10% to 95% noncondensing

