

WS-C3850-48T-S Datasheet



Overview

Cisco next generation Catalyst WS-C3850-48T-S is 48 Ethernet ports stackable enterprise level switch with IP base IOS image.

Quick Specs

Figure 1 shows the appearance of WS-C3850-48T-S.

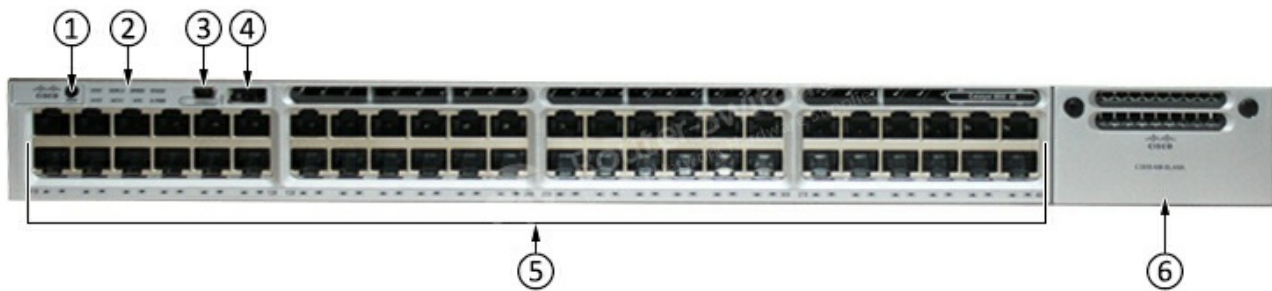


Table 1 shows the Quick Specs.

Product Code	WS-C3850-48T-S
Enclosure Type	1 RU
Feature Set	IP Base
Network SFP uplink module selection	C3850-NM-4-1G C3850-NM-2-10G C3850-NM-4-10G
Ports	48 x 10/100/1000
Maximum stacking number	9
Stack bandwidth	480 Gbps
Forwarding Performance	130.95 Mpps
Switching Capacity	176 Gbps
RAM	4 G
Flash Memory	2 G
Number of AP per switch/stack	100
Number of wireless clients per switch/stack	2000
Dimensions	44.5 cm x 44.5 cm x 4.45 cm
Package Weight	17.49 Kg

Product Details

Figure 2 shows the front panel of the WS-C3850-48T-S.



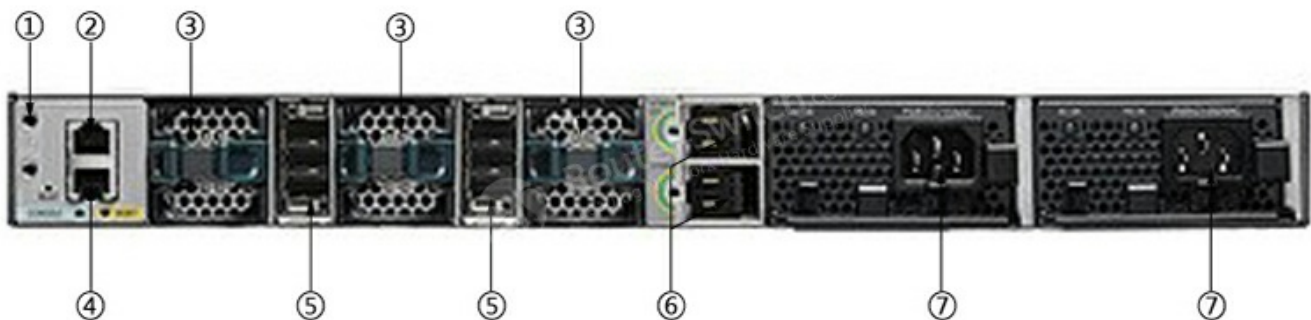
Note[]

(1) Mode button (2) Status LEDs (3) USB mini-Type B (console) port (4) USB Type A storage port (5) 48 * 10/100/1000 Ethernet ports (6) Network SFP uplink module slot

·The status LEDs include STAT (status), DUPLX (duplex), SPEED, STACK, SYST (system), ACTV (active) and S-PWR (Stack Power).

·The switch supports one hot-swappable network module that provides uplink ports to connect to other devices. The switch should only be operated with either a network module or a blank module installed.

Figure 3 shows the back panel of the WS-C3850-48T-S.



Note[]

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

Figure 4 shows the StackWise-480 and StackPower connectors.

IP base switches can only stack with other Catalyst 3850 Series IP base, mix stack with LAN base or IP service feature set is not supported.



Modules, Licenses and Accessories

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

Models	Description
C3850-NM-4-1G	Cisco 3850 Series 4 x 1GE Network Module
C3850-NM-2-10G	Cisco 3850 Series 2 x 10GE Network Module
C3850-NM-4-10G	Cisco 3850 Series 4 x 10GE Network Module
L-C3850-48-S-E	C3850-48 IP Base to IP Services Electronic RTU License
PWR-C1-350WAC	Cisco 3850 Series Power Supply 350W AC
PWR-C1-350WAC/2	Cisco 3850 Series Secondary Power Supply 350W AC Config 1 Secondary Power Supply
CAB-SPWR-30CM	Catalyst 3750X and 3850 Stack Power Cable 30 CM
CAB-SPWR-150CM	Catalyst 3750X and 3850 Stack Power Cable 150 CM
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

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Do you have any question about the WS-C3850-48T-S?

Specification

WS-C3850-48T-S Specification	
model info:	WS-C3850-48T-S
enclosure type	Rack-mountable - 1U
Ports	48 x 10/100/1000
Network management Interface	● 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	176Gbps
Maximum stacking number	up to 9 switches with same IOS feature set in same series
Stack Bandwidth	480Gbps
Forwarding Performance	130.95Mpps
FNF (Flexible NetFlow) entries	48,000 flows
Maximum VLANs IDs	1000
MAC Address Table Size	32K
CPU	Multicore CPU
RAM	4 G
Flash Memory	2 G
Wireless	
Number of AP per switch/stack	100
Number of wireless clients per switch/stack	2000
Total number of WLANs per switch	64
Wireless bandwidth per switch	up to 40Gbps
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	● C3850-NM-4-1G: 4 x 1G uplinks network module ● C3850-NM-4-10G: 4 x 10G uplinks network module ● C3850-NM-2-10G: 2 x 10G or 4 x 1G uplinks network module
Stacking cable	● 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)	● CAB-SPWR-30CM stack power cable with a 30CM length ● CAB-SPWR-150CM stack power cable with a 150CM length
Power supply	PWR-C1-350WAC
Power Device	Power supply - redundant - plug-in module
Power Redundancy	optional
Voltage range (Auto)	100V-240V
Power Consumption of standalone(in Watts)	127.24 (Max)
Miscellaneous	

Width	17.5 Inches (44.5 cm)
Depth	17.7 Inches (44.5 Cm)
Height	1.75 Inches (4.45 cm)
Weight	17.0 Pounds (7.7Kg)
Rack Mounting Kit	optional
MTBF in hours	303,660
Compliant Standards	● 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 ● IEEE 802.3af and IEEE 802.3at
System software / license	
System software	IOS IP Base (Upgradable)
EnergyWise license	ENERGY-MGMT, ENERGY-MGT-100-K9
Software license	● C3850-48-S-E: IP Base to IP Services RTU paper license ● L-C3850-48-S-E: IP Base to IP Services RTU electronic license
Access Point Licenses	● L-LIC-CT3850-UPG: Primary upgrade license SKU for Cisco 3850 wireless controller (e-delivery) ● L-LIC-CTIOS-1A: 1 access point adder license for Cisco IOS Software based wireless controller (e-delivery) ● 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)
Features	● RPS Support ● IP service-level agreements (SLAs) ● Advanced IP unicast routing protocols ● 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
Advanced Network security	● 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