Model	Uplink module	Power consumption (W) (no more than)			
		0% traffic	10% traffic	100% traffic	Weighted average
WS-C3850-24XU	C3850-NM-8-10G	229.7	231.2	248.1	232.7
WS-C3850-12X48U		191.3	193.6	208.1	194.8
WS-C3850-24XS		183.6	185.3	205.5	187.2
WS-C3850-24XS	C3850-NM-2-40G	159.2	161.1	177.0	162.5
WS-C3850-48XS	None	267.0	268.3	288.1	270.1

## Safety and compliance

Table 17 lists the safety and compliance information for the Cisco Catalyst 3850 Series.

Description	Specification	
Safety certifications	UL 60950-1 Second Edition CAN/CSA-C22.2 No. 60950-1 Second Edition EN 60950-1 Second Edition IEC 60950-1 Second Edition NOM (obtained by partners and distributors)	
Electromagnetic emissions certifications	47CFR Part 15 (CFR 47) Class A (FCC Part 15 Class A) AS/NZS CISPR22 Class A CISPR22 Class A EN55022 Class A ICES003 Class A VCCI Class A EN61000-3-2 EN61000-3-3 KN22 Class A KCC CNS13438 Class A EN55024 CISPR24 KN24	
Environmental	Reduction of Hazardous Substances (ROHS) 5	
Noise specifications	Office Product Spec: 48dBA at 30°C (refer to ISO 7779)	
Telco	CLEI code	

## Cisco enhanced limited lifetime hardware warranty (E-LLW)

The Cisco Catalyst 3850 Series Switches come with an E-LLW that includes NBD delivery of replacement hardware where available and 90 days of 8x5 Cisco TAC support.

Your formal warranty statement, including the warranty applicable to Cisco software, appears in the Cisco information packet that accompanies your Cisco product. We encourage you to review carefully the warranty statement shipped with your specific product before use.

Cisco reserves the right to refund the purchase price as its exclusive warranty remedy.

For further information about warranty terms, visit <u>https://www.cisco.com/go/warranty</u>. Table 18 provides information about the E-LLW.

## Table 18. E-LLW details

	Cisco E-LLW
Device covered	Applies to Cisco Catalyst 3850 Series Switches.
Warranty duration	As long as the original customer owns the product.
EoL policy	In the event of discontinuance of product manufacture, Cisco warranty support is limited to 5 years from the announcement of discontinuance.
Hardware replacement	Cisco or its service center will use commercially reasonable efforts to ship a replacement for NBD delivery, where available. Otherwise, a replacement will be shipped within 10 working days after receipt of the RMA request. Actual delivery times might vary depending on customer location.
Effective date	Hardware warranty commences from the date of shipment to customer (and in case of resale by a Cisco reseller, not more than 90 days after original shipment by Cisco).
TAC support	Cisco will provide during business hours, 8 hours per day, 5 days per week basic configuration, diagnosis, and troubleshooting of device-level problems for up to a 90-day period from the date of shipment of the originally purchased Cisco Catalyst 3850 product. This support does not include solution or network-level support beyond the specific device under consideration.
Cisco.com access	Warranty allows guest access only to Cisco.com.

## Licensing for Cisco Catalyst 3850 Series Switches

The three feature sets available with all Cisco Catalyst 3850 Series Switches are:

- LAN Base: Enterprise access Layer 2 switching features
- IP Base: Enterprise access Layer 3 switching features
- IP Services: Advanced enterprise Layer 3 switching (IPv4 and IPv6) features

The LAN Base feature set offers enhanced intelligent services that include comprehensive Layer 2 features, with up to 255 VLANs. The IP Base feature set provides entry-level enterprise services in addition to all LAN Base features, with 1K VLANs. IP Base also includes the support for wireless controller functionality (mobility agent and mobility controller role; additional access point license required for mobility controller role), routed access, smart operations, FNF, and so on. The IP Services feature set provides full enterprise services that include advanced Layer 3 features such as EIGRP, OSPF, BGP, PIM, and IPv6 routing such as OSPFv3 and EIGRPv6. All software feature sets support advanced security and MQC-based QoS.

The Cisco Catalyst 3850 Series Switches with LAN Base feature set can only stack with other Cisco Catalyst 3850 Series LAN Base switches. The same applies to IP Base and IP Services as well. A mixed stack of LAN Base switch with IP Base or IP Services feature set is not supported.

The 12-port and 24-port SFP+- and SFP-based models as well as the 48-port SFP+ model can only be ordered with IP Base or IP Services licenses. Therefore, in order to stack with LAN Base models, they need to be configured in LAN Base mode from the CLI.

Customers can transparently upgrade the software feature set in the Cisco Catalyst 3850 Series Switches through Cisco IOS Software CLI using the Right To Use (RTU)-based software upgrade process. Software activation enables the Cisco IOS Software feature sets. Based on the license's type, Cisco IOS Software activates the appropriate feature set. License types can be changed, or upgraded, to activate a different feature set.

Product number	Description		
WS-C3850-24S-S	Stackable 24 SFP Ethernet ports, with 350WAC power supply 1 RU, IP Base feature set		
WS-C3850-24S-E	Stackable 24 SFP Ethernet ports, with 350WAC power supply 1 RU, IP Services feature set		
WS-C3850-12XS-S	Stackable 12 SFP+ Ethernet ports, with 350WAC power supply 1 RU, IP Base feature set		
WS-C3850-12XS-E	Stackable 12 SFP+ Ethernet ports, with 350WAC power supply 1 RU, IP Services feature set		
WS-C3850-24XS-S	Stackable 24 SFP+ Ethernet ports, with 715WAC power supply 1 RU, IP Base feature set		
WS-C3850-24XS-E	Stackable 24 SFP+ Ethernet ports, with 715WAC power supply 1 RU, IP Services feature set		
WS-C3850-48XS-S	Standalone, 48 SFP+ and 4 QSFP+ Ethernet ports, with 750WAC front-to-back power supply 1 RU, IP Base feature set		
WS-C3850-48XS-E	Standalone, 48 SFP+ and 4 QSFP+ Ethernet ports, with 750WAC front-to-back power supply 1 RU, IP Services feature set		
WS-C3850-48XS-F-S	Standalone, 48 SFP+ and 4 QSFP+ Ethernet ports, with 750WAC back-to-front power supply 1 RU, IP Base feature set		
WS-C3850-48XS-F-E	Standalone, 48 SFP+ and 4 QSFP+ Ethernet ports, with 750WAC back-to-front power supply 1 RU, IP Services feature set		
Cisco Catalyst 3850 bur	ndles		
WS-C3850-24PW-S	Cisco Catalyst 3850 24-port PoE IP Base with 5 access point license		
WS-C3850-48PW-S	Cisco Catalyst 3850 48-port PoE IP Base with 5 access point license		
WS-C3850-24UW-S	Cisco Catalyst 3850 24 Port UPOE with 5 access point licenses IP Base		
WS-C3850-48W-S	Cisco Catalyst 3850 48 Port PoE with 5 access point licenses IP Base		
WS-C3850-48UW-S	Cisco Catalyst 3850 48 Port UPOE with 5 access point licenses IP Base		
WS-C3850-24XUW-S	Cisco Catalyst 3850 24 Port UPOE with 24 100Mbps/1/2.5/5/10 Gbps and 5 access point licenses IP Base		
WS-C3850-12X48UW-S	Cisco Catalyst 3850 48 Port UPOE with 12 100Mbps/1/2.5/5/10 Gbps and 5 access point licenses IP Base		
WS-C3850-16XS-S	Cisco Catalyst 3850 12 SFP+ port stackable model, with C3850-NM-4-10G module and 350WAC power supply. 1 RU, IP Base feature set		
WS-C3850-16XS-E	Cisco Catalyst 3850 12 SFP+ port stackable model, with C3850-NM-4-10G module and 350WAC power supply. 1 RU, IP Services feature set		
WS-C3850-32XS-S	Cisco Catalyst 3850 24 SFP+ port stackable model, with C3850-NM-8-10G module and 715WAC power supply. 1 RU, IP Base feature set		
WS-C3850-32XS-E	Cisco Catalyst 3850 24 SFP+ port stackable model, with C3850-NM-8-10G module and 715WAC power supply. 1 RU, IP Services feature set		
	e Cisco Catalyst 3850 Series		
C3850-NM-4-1G=	4 x Gigabit Ethernet network module spare		
C3850-NM-2-10G=	4 x Gigabit Ethernet/2 x 10 Gigabit Ethernet network module spare		
C3850-NM-BLANK=	Network module blank spare		
C3850-NM-4-10G=	4 x Gigabit Ethernet/4 x 10 Gigabit Ethernet network module spare		
C3850-NM-8-10G=	8 x Gigabit Ethernet/8 x 10 Gigabit Ethernet network module spare		
C3850-NM-2-40G=	2 x 40 Gigabit Ethernet network module spare		
Software licenses			
C3850-12-S-E	Cisco Catalyst 3850 12-port IP Base to IP Services RTU paper license		
C3850-24-L-S	Cisco Catalyst 3850 24-port Switch LAN Base to IP Base RTU paper license		
C3850-48-L-S	Cisco Catalyst 3850 48-port Switch LAN Base to IP Base RTU paper license		
C3850-24-L-E	Cisco Catalyst 3850 24-port LAN Base to IP Services RTU paper license		