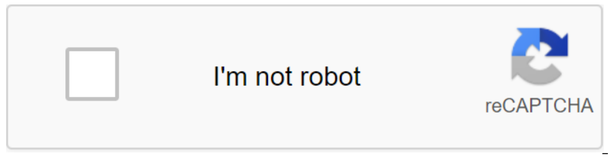
Veteran mod apk android



Continue

Digital Transformation: Converged Wired and Wireless Access and the Aggregation Promise of Digital for Your Business is all about innovation faster while reducing risk, cost and complexity. It is your network that will be the basis for the transformation of your business. But supporting a digital organization will require your network to go beyond mere connectivity to be a platform for understanding, automation, and security. This is the power of cisco's digital ® architecture. Cisco DNA is a monumental shift in how to design and build networks. Cisco Catalyst® 3850 Series, as part of Cisco's next-generation DNA portfolio of enterprise-class stacked Ethernet and Multigigabit Ethernet access and aggregation layer switches, reliably saves virtualization time, more automation and valuable insights that directly meet your evolving business needs, including less installation and operation costs. The Cisco Catalyst 3850 series provides features that are ideal for supporting the convergence of wired and wireless access. The new Cisco Unified Access Data™ Plane (UADP) Application-Specific Integrated Circuit (ASIC) powers the switch and provides a uniform application of wired wireless policy, application visibility, flexibility and application optimization. This convergence is based on the sustainability of Cisco StackWise®-480 technology. Cisco Catalyst 3850 series switches support the full power of IEEE 802.3at over Ethernet Plus (PoE), Cisco Universal Power Over Ethernet (Cisco UPOE®), modular and locally replaced network modules, RJ-45 interfaces and fiber optic interfaces, as well as redundant fans and power sources. Product Review - Integrated Wireless Controller Capabilities with: ◦ Up to 40G wireless capacity per Switch (48-port RJ45 model) ◦ Support for up to 100 hotspots and 2,000 wireless customers at each switchable facility (switch or stack) /100/1000 Mbps PoE data and Cisco UPOE models with energy efficient Ethernet (EEE) - 24 and 48 100 Mbps/1/2.5/5/10 Gbps Cisco UPOE models with energy-saving Ethernet (EEE) 12- and 24-port 1 Gigabit Ethernet SFP-based 12- and 24-port 1/10 Giga Etherbitnet SFP based Models Up links Cisco StackWise-480 technology provides scalability and sustainability with 480 Gbps stack capacity® technology provides power stack stack stack stacking for power redundancy1 - Five additional uplink modules with 4 x Gigabit Ethernet , 2 x 10 gigabit Ethernet, 4 x 10 Gigabit Ethernet, 8 x 10 gigabit Ethernet4, or 2 x 40 gigabit Ethernet SFP ports - Double redundant, modular power sources and three modular fans redundancy - Full IEEE 802.3at (PoE) with 30 watt capacity at all copper ports in Form Factor 1 Rack Unit (RU) - Cisco UPOE with a capacity of 60 W per port in Form Factor 1 Rack Unit (RU) - IEEE 802.3bz (2.3bz (2.3bz 5/5/en) 5 G/s BASE-T) to go beyond 1GB/s with existing Cat5e and Cat6 - IEEE 802.1ba AV Bridging (AVB) built-in to provide the best AV experience to enable improved time synchronization and support software for IPv4 and IPv6 routing software, multi-tissue routing, Modular Service Quality (AIA), Flexible NetFlow (FNF), and Advanced Security Features - Cisco iOS Single Universal Image® Software at all licensing levels, providing an easy way to update Cisco DNA software features and services provided through Cisco ONE™ Software, providing simplified, high-quality solutions with license portability and flexibility - Support AES-256 with a powerful MACSEC 256-bit for SFP and Multigigabit models and a 128-bit encryption algorithm , available on all models - Enhanced Limited Lifetime Guarantee (E-LLW) from the next business day (NBD) advance replacement equipment and 90-day access to Cisco Technical Assistance Center (TAC) support switch model and configuration All ship switches with one of five power sources (350WAC, 715WAC, 750WAC, 1100WAC, or 440CWD). Figures 1 to 4 show Cisco Catalyst 3850 switches. Cisco Catalyst 3850 Series switches Cisco Catalyst 3850 series switches with 12 and 24 1/10 Gigabit Ethernet SFP' Cisco Catalyst 3850 series switches with 12 and 24 1 Gigabit Ethernet SFP ports Cisco Catalyst 3850 series of switches with 10bit Ethernet 48 Table ports 1 Cisco Catalyst 3850 series Giga. Table 1. Cisco Catalyst 3850 Series configurations Model Total 10/100/1000 or SFP or SFP+ ports Default AC power supply Available PoE power POE budget with 1100W secondary PS StackWise-480 StackPower WS-C3850-24T 24 350WAC - Yes Yes WS-C3850-48T 48 WS-C3850-24P 24 PoE+ 715WAC 435W 1535W WS-C3850-48P 48 PoE+ WS-C3850-48F 48 PoE+ 1100WAC 800W 1900W WS-C3850-24U 24 UPOE 1100WAC 800W 1900W WS-C3850-48U 48 UPOE 1100WAC 800W 1900W WS-C3850-24XU 24 UPOE (100Mbps/1/2.5/5/10 Gbps) 1100WAC 580W 1680W WS-C3850-12X48U 48 UPOE (with 12 100Mbps/1/2.5/5/10 Gbps Ports) 1100WAC 630W 1730W WS-C3850-12S 12 SFP 350WAC WS-C3850-24S 24 SFP WS-C3850-12XS 12 1/10G SFP+ 350WAC - WS-C3850-24XS 24 1/10G SFP+ 715 WAC - WS-C3850-48XS 48 1/10G SFP+ 750WAC (front to back) - No No Network modules The Cisco Catalyst 3850 Series Switches support five optional network modules for uplink ports. The default switch configuration does not include the network module. At the time of purchase, the customer has the flexibility to choose from the network modules described in Table 2. Figure 5 shows the following network modules: 4 x Gigabit Ethernet with small Подключенные (SFP) сосуды No 2 x 10 Гигабитный Ethernet с SFP или 4 x Гигабит Ethernet с сосудами SFP 4 x 10 Гигабит Ethernet с SFP' сосуды (поддерживается только на 48-порт Gigabit Ethernet модели или на 12-порт или выше 10 Гигабит Ethernet моделей) Сеть модулей с четырьмя Gigabit Ethernet, два 10 Гигабитных Ethernet SFP, или четыре 10 интерфейсов Gigabit Ethernet SFP, рисунок 6 показывает следующие сетевые модули: 8 x 10 Гигабитных Ethernet с небольшим форм-фактором, подключенным к сосудам (SFP) Сетевые модули с двумя 40-гигабайтными Ethernet (SFP) или восемью 10-гигабайтными интерфейсами Ethernet SFP, модуль C3850-NM-4-10G поддерживается только на 48-портовых моделях Gigabit Ethernet или на 12-портовых или более высоких моделях Gigabit Ethernet. Модули C3850-NM-8x10G и C3850-NM-2x40G поддерживаются на 24-портовых и 48-портовых мультигигабитных переключателях, а также на 24-портовой модели коммутатора 10G SFP. Модули C3850-NM-4-1G и C3850-NM-2-10G не поддерживаются на 12-портовых и 24-портовых моделях SFP. Таблица 2. Network module compatibility matrix Model Network modules WS-C3850-24T C3850-NM-4-1G, C3850-NM-2-10G WS-C3850-48T C3850-NM-4-1G, C3850-NM-2-10G, C3850-NM-4-10G WS-C3850-24P C3850-NM-4-1G, C3850-NM-2-10G WS-C3850-48P C3850-NM-4-1G, C3850-NM-2-10G, C3850-NM-4-10G WS-C3850-48F C3850-NM-4-1G, C3850-NM-2-10G, C3850-NM-4-10G WS-C3850-24U C3850-NM-4-1G, C3850-NM-2-10G WS-C3850-48U C3850-NM-4-1G, C3850-NM-2-10G, C3850-NM-4-10G WS-C3850-24XU C3850-NM-4-1G, C3850-NM-2-10G, C3850-NM-4-10G, C3850-NM-8-10G, C3850-NM-2-40G WS-C3850-12X48U C3850-NM-4-1G, C3850-NM-2-10G, C3850-NM-4-10G, C3850-NM-8-10G, C3850-NM-2-40G WS-C3850-12S C3850-NM-4-1G, C3850-NM-2-10G WS-C3850-24S C3850-NM-4-1G, C3850-NM-2-10G WS-C3850-12XS C3850-NM-4-10G WS-C3850-24XS C3850-NM-4-10G, C3850-NM-8-10G, C3850-NM-2-40G WS-C3850-48XS None An SFP+ receptacle supports both 10 Gigabit Ethernet and Gigabit Ethernet modules, allowing customers to use their investment in Gigabit Ethernet SFP modules and upgrade to 10 Gigabit Ethernet when business demands change without having to do a comprehensive upgrade of the access switch. В отличие от этого, сосуды SFP могут использоваться только в качестве портов Gigabit Ethernet, как показано на примерах в таблице 3. Таблица 3. Примеры конфигурации сетевого модуля Интерфейса Сетевой модуль 10 Gigabit Ethernet SFP порты Gigabit Ethernet SFP порты 4 x Гигабит Ethernet 0 4 x Гигабит Ethernet/2 x10 Gigabit Ethernet сетевые модули 2 0 1 3 2 2 2 0 4 4 x Гигабит Ethernet/4 x10 Гигабитные сетевые модули Ethernet 4 0 0 2 2 3 1 1 1 3 Двойные избыточные модульные источники питания Cisco Catalyst 3850 Серии Коммутаторы поддерживают двойные избыточные источники питания. Коммутатор поставляется с одним источником питания по умолчанию, а второй источник питания можно приобрести в switch order or at a later time. If only one power source is installed, it should always be in the power compartment 1. The switch also comes with three fields being replaced by fans. (See Figure 7.) Double over-powered Table 4 shows the different power sources available in these switches and the available PoE power. Table 4. Power Models Power Default Power Available PoE Power 24-port data switch PWR-C1-350WAC - 48-port data switch 24-port PoE Switch PWR-C1-715WAC 435W 48-port Po E switch 48-port full PoE Switch PWR-C1-1100WAC 800W 24-port UPOE Switch PWR-C1-1100WAC 800W 48-port UPOE Switch 24 Port Multigigabit UPOE Switch PWR-C1-1100WAC 580W 48-port Multigigabit UPOE Switch PWR-C1-1100WAC 630W 12-port SFP switch PWR-C 1-350WAC - 24-port SFP Switch 12-port SFP' switch PWR-C1-350WAC - 24-port SFP' switch PWR-C1-715WAC - 48- Port SFP' Switch (WS-C3850-48XS-S and WS-C3850-48XS-E) PWR-C3-750WAC-R - 48-port SFP' switch (WS C3850-48X S-F-S and WS-C3850-48XS-F-E) PWR-C3-750WAC-F - In addition to the power source listed in Table 5, The 440WDC power source is available as a configuration option, and as a spare (i.e., it can be ordered separately) on all switch models. Dc Power also provides PoE capabilities for maximum flexibility (refer to Table 6 for affordable Budget PoE with DC power). Customers can mix and match air conditioners and DC power in two available power slots. Any of these power sources can be installed in any of the switches. Table 5. Available PoE with DC Power Model Number 440WDC Power Total available PoE budget 24-port PoE Switch 1 220W 2 660W 48-port PoE Switch 1 185W 2 625W 24-port Multigiga6 UPOE Switch 2 2 2 2 2 2 2 2 2 360W 48-port Multigigabit UPOE Switch 2 410W Power over Ethernet Plus (PoE) In addition to PoE (IEEE 802.3af), Cisco Catalyst 3850 Series Support Switches PoE (IEEE 802.3at Standard) that provides up to 30 W capacity per port. Cisco Catalyst 3850 series switches can provide a lower total cost of ownership (TCO) for deployment, which includes Cisco IP phones, Cisco Aironet hotspots®wireless LAN (WLAN) or any IEEE 802.3at device. PoE eliminates the need for wall energy for each PoE-enabled device and eliminates the cost of additional electrical cables and circuits that would otherwise be needed in the IP phone and WLAN deployment. Table 6 shows the power combinations needed for different PoE needs. Table 6. Power requirements for PoE and PoE' 24-port PoE Switch 48-port PoE Switch PoE at all ports (15.4 W per port) One PWR-C1-715WAC One PWR-C1-1100WAC or PWR-C1-715WAC PoE Port) One PWR-C1-1100WAC or two PWR-C1-715WAC Two PWR-C1-1100WAC or one PWR-C1-1100WAC and one PWR-C1-715WAC Cisco Universal Power over Ethernet (Cisco UPOE) Cisco UPOE (Table 7) is technology, offering the following services and benefits. 60W per port to include various end devices such as Samsung VDI customer, BT IP tower systems in trading floors, Cisco Catalyst Compact Switches in Retail/Hospitality Environments, Cisco TelePresence Personal Systems® and Physical Access Control Devices High Availability for Power and Guaranteed Uninterrupted Services, Requirement for Critical Applications (e911) - Reducing OpEx by Ensuring Network Sustainability at a Lower Price by Consolidating Backup Power in a Wiring Closet - Faster New Deployment of Network Network Infrastructures Power supply requirements for Cisco UPOE 24-port UPOE Switch 48-port UPOE Switch 24-port Multigigabit UPOE Switch 48-port multigigabit UPOE UPOE upOE switch UPOE (60W per port) at all (24 port switch) or maximum 30 ports (48 port switch) One PWR-C1-1100WAC and one PWR-C1-715WAC Two PWR-C1-1100WAC Two PWR-C1100WAC Two PWR-C1-1100WAC Cisco Catalyst Multigigabit Ethernet technology Cisco Multigigabit Ethernet is a unique innovation Cisco for the new access switches Of Cisco Catalyst Ethernet. With the huge growth of 802.11ac and new wireless applications, wireless devices are contributing to the demand for greater network bandwidth. This creates a need for technology that supports speeds above 1 Gbps across the entire cable infrastructure. Cisco Multigigabit technology allows you to achieve bandwidth speeds from 1 Gbps to 10 Gbps on a more traditional Cat 5e cable or higher. In addition, Multigigabit ports on some Cisco Catalyst switches support UPOE, which is becoming increasingly important for next-generation workspaces and IoT ecosystems. Cisco Multigigabit technology offers significant benefits for a variety of speeds, cable types and PoE power. The benefits can be grouped into three different areas: - Multiple speeds: Cisco Multigigabit technology supports auto-lifting multiple speeds on the port switch. Supported speeds of 100 Mbps, 1 Gbps, 2.5 Gbps and 5 Gbps on Cat 5e cables and up to 10 Gbps over Cat 6a cable. PoE Power: Technology supports PoE, PoE and UPOE for all supported speeds and cable types. For more information, visit . Architecture SD-Access What if you could give time back to IT? And provide access to the network within minutes for any user or device for any app - without Cisco Software-Defined Access (SD-Access) is the industry's first intent-based network solution based on Cisco Cisco Cisco's digital network principles (Cisco DNA). SD-Access provides automated segmentation for individual users, devices, and applications without the need to reorganize the network. SD-Access automates user access policies so organizations can make sure the right policies are in place for any user or device with any app across the network. This is achieved through a single network fabric in LAN and WLAN that creates a consistent user experience anywhere without compromising security. Organizations have many problems today in managing the network to drive business results. These limitations are due to manual configuration and fragmentary tool offerings. SD-Access Provides: - Transformational Management Solution That Reduces Operating Costs and Increases Business Flexibility - Consistent Wired and Wireless Network Management, Security and Policy - Automated Network Segmentation and Group Policy - Contextual Information for Rapid Problem Resolution and Capacity Planning - Open and Programmable Interfaces to Integrate With Third-Party Solutions To Review Key Usage Cases, which SD-Access addresses, relate to SD-Access addresses. In order to benefit from the SD-Access architecture, you need to purchase a package of additional licenses. This licensing package includes Cisco DNA Essentials and Cisco dna Advantage options. Additional licenses must be purchased for 3-, 5-, (and therefore are also known as term-based licenses). The SKUs for these packages are listed in Table 10 below. Ordering and managing licenses with smart accounts: Creating smart accounts with Cisco Smart Software Manager (SSM) allows you to order devices and licensing packages, as well as manage software licenses from a centralized website. You can set up Cisco SSM to receive daily email alerts and receive notifications that additional licenses you want to renew have expired. When the license expires, you can either extend the license add-on to continue using it, or disable the additional license, and then restart the switch to continue working with the basic license capabilities. Note: You are not required to deploy a Cisco DNA center just to use one of the license packages. Table 8 shows features included in Essentials and Advantage packages. Table 8. The basics and advantage of the Cisco DNA Essentials feature package Cisco DNA Advantage Day 0 Network to bring up automation Cisco Network Plug-and-Play app, network settings, device credentials - Element detection, inventory, topology, software, licensing and configuration management - Management Patching ✗ - Network Product Incident Response Unit (PSIRT), End-of-Life Reporting/End Sale, Telemetry Ratio, Customer 360, Device 360, Top Conversation/Conversation/ Telemetry Collection and Correlation: Static configuration and monitoring of Easy'oS application based on SD-Access automation policy, group access policy, application priority, monitoring, and trajectory selection; SD-Access with built-in wireless ✗ - Network assurances and analytical studies obtained as a result of analytics and machine learning for the network, customers and applications that cover onboard, connectivity and performance ✗ - Table 9 shows the documents on these licenses. Table 9. Basics and Benefit Product Id Product ID Description 12-port C3850-DNA-E-12 C3850 Cisco DNA Essentials, 12-port license C3850-DNA-E-12-3Y C3850 Cisco DNA Essentials, 12-port, 3-year license C3850-DNA-E-12-5Y C3850 Cisco DNA Essentials, 12-port, 5-year license C3850-DNA-A-12 C3850 Cisco DNA Advantage, 12-port term license C3850-DNA-A-12-3Y C3850 Cisco DNA Advantage, 12-port, 3-year license C3850-DNA-A-12-5Y C3850 Cisco DNA Advantage , 12-port, 5-year license term 24-port C3850-DNA-E-24 C3850 Cisco DNA Essentials, 24-port license C3850-DNA-E-24-3Y C3850 Cisco DNA Essentials, 24-port, 3-year license period C3850-DNA-E-24-5Y C3850 Cisco DNA 24-port, 5-year license C3850-DNA-A-24 C3850 Cisco DNA Advantage, 24-port term license C3850-DNA-A-24-3Y C3850 Cisco DNA ADVANTAGE, 24-port, 3-year license C3850-DNA-A-24-5Y C3850 Cisco DNA DNA Advantage Advantage 24-port, 5-year license 48-port C3850-DNA-E-48 C3850 Cisco DNA Essentials, 48-port term license C3850-DNA-E-48-3Y C3850 Cisco DNA Essentials, 48-port, 3-year-old license C3850-DNA-E-48-5Y C3850 Cisco, Cisco, Cisco, Cisco, Cisco, Cisco DNA 48-port, 5-year license C3850-DNA-A-48 C3850 Cisco DNA Advantage, 48-port term license C3850-DNA-A-48-3Y C3850 Cisco DNA Advantage, 48-port, 3-year license C3850-DNA-A-48-5Y C3850 Cisco DNA Advantage, 48-port , 5-year license Spare C3850-DNA-E-12 C3850 Cisco DNA Essentials, 12-port term license spare C3850-DNA-A-12 C3850 Cisco DNA Advantage, 12-port term license spare C3850-DNA-E-24 C3850 Cisco DNA Essentials, Essentials 24-port license to spare C3850-DNA-A-24 C3850 Cisco DNA Advantage, 24-port term license spare C3850-DNA-E-48 C3850 Cisco DNA Essentials, 48-port-term-license-spare C3850-DNA-A-48 C3850 Cisco DNA Advantage, 48-port license to spare Benefits Converged Wired plus wireless access Cisco Catalyst 3850 is the first glassable access switching platform that allows wired plus wireless services on a single Cisco iOS XE Software-based platform. In doing so, Cisco is pioneering a host of rich features such as high availability based on Stateful Switchover (SSO) on styling, granular AIA, security and flexible NetFlow (FNF) through wired and wireless in seamless fashion. In addition, wired plus wireless features are combined into a single Cisco iOS Software, which reduces the number of software images that users must qualify/certify before they can incorporate them into their network. The Command-Line Interface (CLI) single console port reduces the number of touch points to manage wired plus wireless services, thereby reducing network complexity, simplifying network operations, and reducing TCO to manage infrastructure. Converged wired plus wireless not only improves wireless bandwidth across the network, but also the scale of wireless deployment. Each 48-port Cisco Catalyst 3850 provides 40 Gbps of wireless bandwidth (20 Gbps per 24-port/12-port model). This wireless capacity increases with the number of members in the stack. This ensures that the network can scale with current wireless bandwidth requirements as dictated by IEEE 802.11n-based hotspots and with future wireless standards such as IEEE 802.11ac. In addition, Cisco Catalyst 3850 distributes wireless controller features to achieve better scalability. Each Cisco Catalyst 3850 switch/stack can work as a wireless controller in two modes (Figure 8): - Mobile Agent (MA): This is the default mode in which the Cisco Catalyst 3850 switches ships. In this mode, the switch is able to turn off CAPWAP tunnels from access points and provide wireless connectivity to wireless customers. In this mode, wireless customer databases can be used, as well as customizing and enforcing security policies and AIA for wireless customers and hotspots. No additional license on top of the IP base is required to operate in mobility agent mode. Mobility Controller (MC): In this mode, the Cisco Catalyst 3850 switch can perform all mobility agent tasks in addition to mobility coordination, radio resource management (RRM) and Cisco CleanAir coordination® as part of the mobility subdomin. The mobility controller mode can be turned on on the CLI switch. The IP Base license level is required when the Cisco Catalyst 3850 switch acts as a mobility controller. The Cisco 5508 (WLC 5508), Cisco 2 Wireless Service Module (WiSM2) (when AireOS 7.3) launches, and the 5760 wireless LAN controller can also perform this role for larger deployments. With mobility agents located in wiring cabinets providing 40 Gbps wireless to the 48-port Gigabit Ethernet RJ45 Switch (n x 40 Gbps for Stack n Switches) and mobility controllers controlling some of the central wireless features, converged wireless deployment access provides best-in-class scalability for wireless and significantly improved wireless bandwidth. Controller (MC) and Mobile Agent (MA) For more information on converged wired plus wireless access, refer to the DOCUMENT HERE: here: Distributed Intelligent Services Flexible NetFlow (FNF) Full visibility in wired plus wireless traffic is achieved by controlling access points and providing wireless access points (CAPWAP) stop tunnel on the switch. This helps identify users and user traffic streams to identify potential attackers and take corrective action at the access level before the attack penetrates further into the network. This is achieved with FNF, which tracks each input stream and exits from the switch stack for wired and wireless users. It also helps to identify the top wired/wireless go talk and ensure compliance with appropriate bandwidth training policies. The Cisco Catalyst 3850 commute has advanced wired plus wireless AIA capabilities. It uses the modular interface of the Cisco zoS command line (MPC). The switch controls wireless bandwidth using unprecedented hierarchical bandwidth management, from the level of each access point and drilling further down to the radio, to one identification set (SSID), and to the level of one user. This helps manage and prioritize available bandwidth between different radio stations and different SSID (enterprise, guest, and so on) within each radio on a percentage basis. The switch is also able to automatically distribute equal bandwidth between connected users within this SSID. This ensures that all users within this SSID get a fair share of available bandwidth when connected to the network. UADP ASIC provides hierarchical bandwidth management and equitable bandwidth distribution, thus providing the AIA's hardware base for optimizing performance in line traffic. In addition to these capabilities, the switch can make a service class (CoS) or differentiated Code Point (DSCP) service based on queues, police, wiring formation and labeling plus wireless traffic. This allows users to create common policies that can be used through wired plus wireless traffic. Cisco Catalyst 3850 also supports downloadable policy names from the Cisco Identity Services Engine (ISE), when a user successfully authenticates the network using ISE. Cisco Catalyst 3850 security provides a rich set of security features for wired plus wireless users. Features such as IEEE 802.1x, Port Security, DhCP Host And Guard Protocol(Dynamic ARP Inspection, RA, IP Source Guard, Control Plane Protection (CoPP), Wireless Intrusion Prevention Systems (WIPSs) and so on provide protection against unauthorized and intruders. With different wired plus wireless users connected to the network, the switch supports session-informed networks in which each device connected to the network is identified as one session, and unique access management lists (ACLs) and/or AIA policies can be identified and applied using ISE for each of these sessions, providing better control over control over each of these sessions Connect to the network. AES-256 MACsec encryption is the IEEE 802.1AE standard for authentication and encrypting packages between switches and endpoints. Cisco Catalyst 3850 series switches support 256-bit (SFP and Multigigabit models only) and 128-bit Advanced Encryption Standard (AES) at all ports at all speeds, providing the most secure link encryption. Sustainability cisco StackWise-480 technology Cisco StackWise-480 technology is built on a highly successful industry leading StackWise® technology that is premium styling architecture. The StackWise-480 has a stack capacity of 480 Gbps. StackWise - 480 uses Cisco iOS Software SSO to ensure stack resilience. Stack behaves like a single switching block, controlled by an active switch chosen by member switches. The active switch automatically selects a backup switch in the stack. The Active Switch generates and updates all the switch/routing/wireless information and constantly syncs that information with the backup switch. If the active switch fails, the backup switch takes on the role of an active switch and continues to support the stack. Access points continue to be connected while switching from active to waiting. The work stack can accept new members or remove old ones without interruption. StackWise-480 creates a highly-elastic single system of up to nine switches, providing simplified controls using a single IP address, a single Telnet session, one CLI, auto-engineering, autocompination, autocompination, and more. StackWise-480 also allows you to switch locally in Cisco Catalyst 3850 switches. Cisco StackPower Cisco Catalyst 3850 uses Cisco StackPower technology at Cisco Catalyst 3850 Series. StackPower is an innovative power connection system that allows you to use the power sources in the stack as a common resource among all switches. Cisco StackPower combines individual power sources installed in switches and creates a power pool to direct that power to where it needs to be. Up to four switches can be set up in the StackPower stack with a special connector at the back of the switch using the StackPower cable, which is different from the StackWise-480 cables. (See Figure 9.) StackWise-480 and StackPower StackPower connectors can be deployed either in power separation mode or redundancy mode. In power-sharing mode, the power of all power sources in the stack is aggregated and distributed between the switches in the stack. In over-mode, when the total stack capacity budget is calculated, the power of the largest power source is not turned on. This power is in and is used to maintain power for switches and connected devices when one of them fails, allowing the network to run without interruption. Break. One power failure, StackPower mode becomes a power separation. StackPower allows customers to simply add one extra power supply to any switch stack and either provide power redundancy for any of the stack members or simply add more power to the overall pool. StackPower eliminates the need for an external excess power system or the installation of dual power supplies in all members of the stack. StackPower is available at the LAN Base (or above) license level. For a LAN base, cables must be purchased separately. The foundation for the open network environment of The Heart Cisco Catalyst 3850 is UADP ASIC with programmability for future functions and intelligence with investment protection. The new ASIC provides the basis for converged APIs through Wired and Wireless, Cisco Open Network Environment, Software-Defined Network (SDN) Readiness, and OnePK SDK through software updates throughout the life of the product. The software features and services at Cisco Catalyst 3850 Series of Switch Software Services supported by Cisco Catalyst 3850 Series Switches can be classified into five broad categories: - Simplicity of Operations - Advanced Security Features - Sustainability Of Applications Visibility and Control - Audio Video Overcoming the Simplicity of Cisco Catalyst 3850 Operations Helps Reduce Operating Costs Through: Cisco Catalyst SmartOperations Cisco Catalyst SmartOperations that make it easier to deploy, reconfigure, and troubleshoot. In addition to adaptive, always on technologies such as StackWise-480 and StackPower, Cisco Catalyst SmartOperations allow zero-touch installations and switches replacement, quick upgrades, and ease of troubleshooting with reduced operating costs. Features include Smart Install, Auto Smartports, Smart Configuration and Smart Troubleshooting to enhance operational excellence: - Cisco Smart Install is a transparent connectivity and playback technology to customize cisco iOS image and switch configurations without user intervention. Smart Install uses dynamic DISTRIBUTION of IP addresses and assistance of other switches to facilitate installation, providing a transparent connected network and playback. Cisco Auto Smartports provides an automatic configuration as devices connect to the switch port, allowing you to automatically connect and connect the device to the network. - Cisco Smart Troubleshooting is a wide range of diagnostic systems for debugging and system status checks in the switch, including General Online Diagnostics (GOLD) and Onboard Bounce Journal (OBFL). The Built-in Event Manager (EEM) is a powerful and flexible feature that provides Detection of network events and automation on board.

Using EEM, customers can tailor the behavior of their network devices to their business needs. This feature requires a set of IP base functions. Easy to deploy and manage is a user experience: IP ◦ (SAS) service level agreements allow customers to deliver new business-critical IP applications, as well as IP services that use data, voice and video on IP networks. This feature requires a set of IP services. ◦ the dhCP automatic check of multiple switches through the loading server makes it easier to deploy the switch. ◦ Automatic zoS (AutoSOS) simplifies the AIA configuration in Voice over IP (VoIP) networks by providing interface and global switching commands to detect Cisco IP phones, classify traffic, and enable queue configurations. ◦ auto-conversation at all ports automatically selects the mode of transmission of semi- or full duplex to optimize bandwidth. ◦ automatic media-dependent crossover interface (MDIX) automatically regulates the transmission and receipt of steam when installing the wrong type of cable (crossover or straight through). ◦ AV Bridging provides a reliable synchronized time transfer without clicks or clicks or video dropouts. Simplified configuration and connectivity: ◦ Dynamic Master's Protocol (DTP) facilitates the dynamic configuration of the trunk in all switch ports. ◦ Aggregation Protocol (PAgP) automates the creation of Cisco Fast EtherChannel or Gigabit EtherChannel groups to link to another switch, router or server. Link Aggregation Control (LACP) ◦ allows you to create Ethernet mapping with devices that match IEEE 802.3ad. This feature is similar to Cisco EtherChannel and PAgP technology. ◦ Single-directional Link Detection Protocol (UDLD) and aggressive UDLD allow for the detection and sticking of single-directional connections caused by incorrect fiber optic wiring or port malfunctions on fiber optic interfaces. ◦ Cisco VLAN Trunking Protocol (VTP) Version 3 supports dynamic VLANs and dynamic trunk configuration in all switches. ◦ AV Bridging provides reliable A/V streaming without the need for installation to perform extensive manual network settings. Effective Switch: Switching Database Manager (SDM) ◦ templates, VLAN (LAN Base-specific) and extended template allow the administrator to automatically optimize the distribution of Ternary Content-Addressable Memory (TCAM) to the desired functions based on specific deployment requirements. the Address Resolution (ARP) ◦ works in conjunction with the private advantage of VLAN to minimize broadcasting and maximize available bandwidth. ◦ management of the primary configuration Cisco StackWise-480 helps that all switches are automatically updated when the main switch gets a new version of the software. Automatic validation and software update help ensure that all stack members have the same version of the software. ◦ trivial file protocol (TFTP) reduces the cost of administering software updates by downloading from a central location. ◦ Network Time (NTP) provides accurate and consistent time stamping for all intranet switches. Multicast: ◦ Optimized Multicast for Wired Plus Wireless: Cisco Catalyst 3850 offers great multicast efficiency, getting only one multicast stream and replicating it for all connected wired plus wireless devices connected to this switch. ◦ Internet Group Management Protocol (IGMP) v1, v2, v3 IPv4: Multicast Listener Discovery (MLD) v1 and v2 snooping provides fast customer connections and multicast threads and limits the bandwidth of heavy video traffic only for requesters. Monitoring: ◦ Switch Port Analyzer (RSPAN) allows administrators to remotely monitor ports in the Layer 2 switch network from any other switch on the same network. ◦, Embedded Remote Monitoring (RMON) supports four RMON groups (history, statistics, alarms, and events) to improve traffic management, monitoring and analysis. ◦ layer 2 makes it easier to troubleshoot by identifying the physical path the package takes from source to destination. ◦ Wireless RF provides both real-time and historical information about Russian interference affecting network performance between controllers using Cisco CleanAir system integration technologies. The cisco Catalyst 3850 Series Switches, designed and designed by Cisco, delivers optimal energy-saving, EEE (at RJ45 ports), a low-cost operation for best-in-class power and power management capabilities. Cisco Catalyst 3850 ports are capable of reducing power modes, so that ports not used can move into a state of lower power. Other effective functions of the switch are: - Cisco Discovery Protocol Version 2 allows Cisco Catalyst 3850 Series Switches to negotiate a more detailed power setup when connected to a Cisco-powered device, such as IP phones or hotspots, than what is provided by the IEEE classification. The power supply team at each port allows customers to specify the maximum capacity in a single port. For the Port PoE energy sense measures the actual power drawn, allowing more intelligent control of powered devices. - PoE MIB provides semblance of energy consumption and allows customers to set different power level thresholds. The organization, responsible for the environment, can choose to disable radio-point access to reduce energy consumption off-peak clock. Lan's integrated wireless CONTROLLER avoids deploying additional devices on the network. Cisco Catalyst 3850 Series Network Management Switches offer both excellent CLI for detailed configuration and Cisco Prime™ infrastructure for unified wired plus wireless control. The basic infrastructure provides 0-day and ongoing security, constant monitoring and maintenance, configuration templates, and 360-degree views of devices and users, and serves as an FNF collector for user traffic views using the Prime Assurance Manager module. For more information on Cisco Prime's infrastructure, visit . The Cisco Catalyst 3850 Advanced Security Features of the Switch Series support advanced security features, including, but not limited to: -Protection from intruders: port security ◦ provides access to access or a mainline port based on a mac address. It limits the number of MAC addresses studied to deny the MAC a flooding problem. ◦ DHCP surveillance prevents malicious users from spoofing the DHCP server and sending bogus addresses. This feature is used by other major security features to prevent a number of other attacks, such as ARP poisoning. ◦ dynamic ARP (DAI) helps ensure the integrity of the user by preventing malicious users from using the unsafe nature of ARP. protecting the IP source ◦ prevents the spoofing (i.e. by taking) another user's IP address by creating a mandatory table between the customer's IP address and MAC address, port, and VLAN, and using it to selectively block bogus packages. ◦ Unicast Reverse Path Forwarding (uRPF) helps mitigate problems caused by the introduction of developmental defects or fake (fake) IP addresses by discarding IP packages that do not have a verifiable IP address. ◦ data support in the SPAN port allows Cisco Intrusion Detection System (IDS) to take action when an intruder is detected. User Authentication: ◦ flexible authentication that supports multiple authentication mechanisms, including 802.1X, MAC authentication bypass, and web authentication using a single, consistent configuration. ◦ changing the RADIUS resolution and downloadable calls for comprehensive policy management capabilities. ◦ Private VLAN restricts traffic between hosts in the switch, segregated traffic at level 2, turning the broadcast segment into a non-road multi-stage segment. The private edge of VLAN provides security and insulation between switch ports, which helps ensure that users can't spy on other users' traffic. ◦ Multidomain authentication allows IP phone and PC for authenticity on the same switch port, placing them on the appropriate voice and VLAN data. ◦ MAC MAC administrators who will be notified of users added or removed from the network. ◦ mobility and security for a secure, reliable wireless connection and consistent end-user experience. Increase network availability by proactively blocking known threats. ◦, IGMP filtering provides multicast authentication by filtering non-subscribers and limiting the number of simultaneous multicast threads available to the port. ACLs: cisco ◦ safety VLAN ACLs on all VLANs prevent unauthorized data flows from the bridge to VLANs. ◦ Cisco standard and advanced IP ACL security router define safety policies on route interfaces for aircraft and data traffic management. IPv6 ACLs can be used to filter IPv6 traffic. ◦ port-based for Layer 2 interfaces allows security policies to be applied at individual switch ports. Device Access: ◦ Secure Shell (SSH), Kerberos, and Simple Network Management Protocol Version 3 (SNMPv3) provide network security by encrypting administrator traffic during Telnet and SNMP sessions. The SSH, Kerberos and cryptographic version of SNMPv3 require special cryptographic software due to U.S. export restrictions. ◦ TACACS and RADIUS authentication, it makes it easier to centralize the switch and restricts unauthorized users from changing their configuration. ◦ layered security on the console prevents unauthorized change in the switch configuration. - The Bridge Protocol Data Group (BPDU) Guard turns off the Spanning Tree PortFast interfaces when receiving BPDUs to avoid random topology cycles. - Spanning Tree Root Guard (STRG) prevents edged devices not in network administrator management from becoming Spanning Tree Protocol root nodes. Wireless security does offer DTLS encryption that meets CAPWAP requirements to ensure that they encrypt between access points and controllers through remote WAN/LAN links. The resilience of limitless networks provides enterprise mobility and business-class video services. The industry's first unified network (wired plus wireless) location service allows you to track mobile assets and users of these assets for both wired and wireless devices. The true limitless experience includes the following feature sets in the Cisco Catalyst 3850 Switch: Cisco Catalyst 3850 series supports high availability features, including but not limited to: Cross-Stack EtherChannel provides the ability to customize Cisco EtherChannel technology for various members of the stack for high stability. Flexlink ensures redundancy of links over convergence time than 100ms. - IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) provides rapid convergence of tree-covering trees regardless of timers covering the tree, and offers the advantage of balancing layer 2 load and distributed processing. - Per-VLAN Rapid Spanning Tree (PVRST) allows you to quickly edge the tree (IEEE 802.1w) re-movement based on the covering trees behind the VLAN, providing a simpler configuration than MSTP. In both MSTP and PVRST modes, folded units behave like a single node with a covering tree. Automatic port switch recovery (recovery error-disconnection) automatically tries to activate a disconnected link due to a network error. Cisco Express Rewind Hardware RewindIng Architecture's High Performance IP Routing Service provides extremely high PERFORMANCE IP routing in Cisco Catalyst 3850 Series Switches: - IP unicast routing protocols (static, routing information protocol Version 1 RIPv1, and RIPv2, RIPng, Advanced Internal Gateway Routing Protocol (EIGRP) Stub) are supported for small networks Limited static routing with a set of features. The equal cost of routing makes it easier to balance the layer 3 load and redundancy across the stack. Enhanced IP unicast (Open Shortest Path First,OSPF), EIGRP, Border Gateway Protocol Version 4 (BGPv4) and Intermediate Version 4 are supported to balance the load and build scalable LANs. IS-ISv4. IPv6 (OSPFv3, EIGRPv6) is supported in the equipment for maximum performance. OSPF for route access is included in the IP base image. A suite of IP services is required for the full OSPF, EIGRP, BGPv4 and IS-ISv4. Policy-based routeization (PBR) provides excellent control, making it easier to redirect threads regardless of the route protocol you set up. A set of IP-based features is required for PBR. Virtual routing and rewinding (VRF)-Lite allows the service provider to maintain two or more VPNs with overlapping IP addresses. A set of IP services is required for VRF-Lite. Supported by the Independent Multicast (PIM) Protocol for multi-cash IP routing, including PIM Sparse Mode (PIM-SM), PIM Dense Mode (PIM-DM), low-interest PIM mode, and multicast (SSM). You need a set of IP services. IPv6 addresses are supported on interfaces with relevant show commands to monitor and troubleshoot. The superb Cisco Catalyst 3850 Series offers Gigabit Ethernet speed with intelligent services that keep traffic flowing smoothly, even at 10 times the normal speed of the network. Industry-leading cross-stack labeling, classification and planning mechanisms provide superior performance for data, voice and traffic, with the speed of the wire. Below are some of the AIA features supported in the Cisco Catalyst 3850: 3850: Granular wireless bandwidth management and fair sharing of Cisco iOS Software and UADP ASIC technology to provide hierarchical bandwidth management at line speed (on access point, on radio, on SSID, on customer-based policies). Fair exchange of information between users within SSID ensures that no user is starving because of other heavy users. Fair sharing is automatically enabled for wireless communications at the user level as well as at the SSID level. 802.1p The CoS and DSCP field classification is provided using labeling and reclassification based on each package by source and destination IP address, MAC address or layer control protocol 4/User Data Protocol (TCP/UDP). Planning the Robin Round form (SRR) helps ensure differential prioritization of package flows by intelligently servicing entry queues and exit queues. Weighted tail drop (WTD) prevents congestion in queues at the entrance and exit before a failure occurs. A strict priority queue helps ensure that the top priority packages are serviced before all other traffic. Cisco Committed Information Rate (CIR) provides bandwidth up to 8 Kbps. Eight queues at the exit to the port for wired traffic and four queues at the exit for wireless assistance allow differentiated management of different types of traffic throughout the stack for wired traffic. There are up to 2,000 police officers per switch. Application visibility and control using Cisco's agile IOS Software FNF is the next generation in flow visibility technology, allowing network infrastructure visibility, lower operating costs, and improved capacity planning and detection of security incidents with increased flexibility and scalability. Cisco Catalyst 3850 provides optimized application visibility with FNF via wired plus wireless. The switch is capable of up to 48,000 flow inputs on the 48-port model and up to 24,000 stream entries per 12-port and 24-port model via wired plus wireless. With UADP ASIC, Cisco Catalyst 3850 provides the next generation of flow technology with unprecedented flexibility and comprehensive visibility extending from Layer 2 (MAC and VLAN) to Layer 4 (TCP/UDP) flags and so on through wired plus wireless traffic. The Cisco Catalyst 3850 switch is a medianet capable of providing visibility and troubleshooting capabilities through plus wireless video traffic. Specific medianet features will be included in future software updates. Thread data collected by the FNC can be exported to an external collector for analysis and reporting or tracked by EEM. EEM. Cisco Catalyst 3850 allows for powerful on-the-box and customizable correlation events and action policies with EEM, allowing switches to trigger individual event signals or political action when a predetermined condition is met. If you don't need an external device, customers can use the existing infrastructure to monitor traffic, making traffic analysis economical even on a large IP network. Details of Cisco FNF are available on . High-performance video wirelessly integrates Cisco VideoStream technology to optimize video delivery through WLAN. Wired plus wireless IP telephony supports unified communication to improve collaboration through messaging, presence and conferences and supports all Cisco Unified Communications wireless IP phones for cost-effective real-time voice service. Audio video overcoming with Cisco iOS® XE Software release 16.3, Cisco Catalyst 3850 Multigigabit and 3850 10G SFP currently support the IEEE 802.1 AVB standard. This standard provided the means for high reliable delivery of low delay, synchronization of AV streaming services time through layer 2 of Ethernet networks. The standard also makes it easier to integrate new services and compatibility of AV equipment from different suppliers. Regardless of whether AV connections are the end point of analog or inflexible digital one-to-one, network transportation allows many, many transparent plug-in connections and playback for multiple AV endpoints. Benefits - Improves experience quality by reducing nervousness and delay to synchronize in delivery time of high-quality AV - ensures scalability of applications in various network deployments, Including expansive and complex AV infrastructure - Reduces total cost of ownership (TCO) with reduced cables (reduces CapEx) and no license fees (reduces OpEx) Options to deploy Campus In Campus-type deployment, operating Cisco Catalyst 3850 in motion agent mode and centralization of mobility controller functionality in WLC 5760, WLC 5508, or WiSM2 helps to achieve better scalability and performance. Cisco Catalyst 3850 provides CAPWAP termination for access points, uniform compliance policy for wireless customers, better wireless bandwidth and a single configuration based on Cisco iOS software and wired monitoring plus wireless features. The mobility controller provides central mobility, RRM and CleanAir coordination. Inverse compatibility with traditional centralized wireless deployment mode on WLC 5508, WiSM2 WLC 5760 helps ensure that customers can migrate to Cisco Catalyst 3850 through a converged access approach in stages, ensuring that the controller continues for existing access points. This migration also provides investment protection for existing existing controller infrastructure. The phased introduction of the new Cisco Catalyst 3850 helps ensure seamless migration to converged wireless access mode. Figure 10 shows the Cisco Catalyst 3850 switchboard in the campus type deployment. The Mobility Controller (MC) and mobile agent (MA) Cisco Catalyst 3850 branch are optimized to deploy the branch when it is operating in mobility controller mode. In this mode, the switch can not only turn off CAPWAP tunnels from access points and connect customers, but also manage mobility within the branch. This eliminates the need for a local controller in each branch in addition to the access level switches. In addition, full visibility in wired plus wireless traffic means that the WAN router can prioritize the right wired plus wireless traffic to and from the affiliate. Figure 11 shows Cisco Catalyst 3850 in branch access type deployment. Deploying the Cisco Catalyst 3850 series to affiliate access the New 12-port and 24-port SFP or SFP-based Cisco Catalyst 3850 models, as well as the unsteady 48-port SFP model can also be used in the industry to aggregate traffic from small access switches through fiber optic links to more secure and EMI-sensitive deployments (figure 12). The deployment of mixed copper and fiber compounds with the Cisco Catalyst 3850 stack in the 10 Branch Switch Performance Table shows the performance specifications of cisco Catalyst 3850 Series Switches. Table 10. Cisco Catalyst 3850 Series performance specifications Performance Numbers for all Switch models Switching capacity 176 Gbps to 48-port Gigabit Ethernet Model 92 Gbps on 24-port Gigabit Ethernet model 68 Gbps on 12-port Gigabit Ethernet model 640 Gbps s on 24-port Multigbit Ethernet Model 47 2 Gbps on 48-port Multigigabit Ethernet model 1280 Gbps on 48-port 10 Gigabit Ethernet SFP model 640 Gbps on 24-port 10 Gigabit Ethernet SFP model 320 Gbps on 12-port 10 Gigabit Ethernet SFP Model Stack bandwidth 480 Gbps Total Number of MAC Addresses 32000 Total Number of Routes IPv4 (ARP Plus Learned Routes) 24000 FNF Record 48000 Stream on 48-Port Gigabit Ethernet Model 48 24000 streams on 12-port and 24-port Gigabit EtherNet model 96000 streams on 48-port 10 Gigabit Ethernet SFP Model 48000 streams on 24-port 10 Gigabit Ethernet SFP model 24000 streams on 12-port 10 Gigabit Ethernet SFP MODEL DRAM 4 GB (8GB on 48-port model SFP) Flash 2GB (4GB on 12-port and 24-port SFP models, 8GB on 48-port model SFP) VLAN IDs 4000 Total switched virtual interfaces (SVIs) 1000 Jumbo frame 9198 bytes Total shuttle ports at 3850 stack 208 Wireless number of access points per switch /stack 100 Number of wireless customers per switch / 2000 Total number of WLANs per Switch 64 Wireless bandwidth on Switch Up to 40 Gbps per 48-port Gigabit Ethernet model Up to 20 Gbps per 24-port Gigabit Ethernet model model model Aironet access point series 3600, 3500, 2600, 1600, 1260, 1140, 1040 Forwarding rate of switch models (with 2 x 10 Gigabit + 2 x 1 Gigabit Ethernet uplinks for 12-port and 24-port models and 4 x 10 Gigabit Ethernet uplinks for 48-port models) Model Forwarding rate WS-C3850-12S 50.5 Mpps WS-C3850-24T WS-C3850-24P WS-C3850-24S 68.4 Mpps WS-C3850-48T WS-C3850-48P WS-C3850-48F 130.95 Mpps WS-C3850-24XU 500 Mpps (80B packets) WS-C3850-12X48U 460 Mpps (64B packets) WS-C3850-12XS 227.28 Mpps WS-C3850-24XS 454.55 Mpps WS-C3850-48XS 909 Mpps Размеры, вес, акустика, среднее время между сбоями и спецификациями экологического диапазона для Cisco Catalyst 3850 Серии коммутаторов Таблица 11 показывает размеры, вес, акустические, среднее время между неудачей (MTBF), и экологический диапазон. Вес не включает в себя uplink FRU. Вес включает в себя сборку шасси, как он поставляется (с вентиляторами), один источник питания и, и один слот питания пустой. Таблица 11. Dimensions, weight, acoustic, MTBF, and environmental range[11] Dimensions (H x W x D) Inches Centimeters WS-C3850-12S WS-C3850-24S WS-C3850-24T WS-C3850-24P WS-C3850-48T WS-C3850-48P 1.75 x 17.5 x 17.7 4.45 x 44.5 x 45.0 WS-C3850-48F WS-C3850-48U WS-C3850-24U WS-C3850-24XU WS-C3850-12X48U 1.75 x 17.5 x 19.2 4.45 x 44.5 x 48.8 WS-C3850-12XS WS-C3850-24XS 1.75 x 17.5 x 17.7 4.45 X 44.5 x 45.0 WS-C3850-48XS 1.75 x 17.5 x 20.1 4.45 X 44.5 x 51.1 Weight Pounds Kilograms WS-C3850-12S 15.48 7.02 WS-C3850-24S 15.5 7.03 WS-C3850-24T 15.9 7.2 WS-C3850-24P 16.3 7.4 WS-C3850-24U 16.5 7.5 WS-C3850-48T 17.0 7.7 WS-C3850-48P 17.4 7.9 WS-C3850-48F 17.6 8.0 WS-C3850-48U 17.6 8.0 WS-C3850-24XU 17.6 8.0 WS-C3850-12X48U 17.6 8.0 WS-C3850-12XS 12.9 5.8 WS-C3850-24XS 13.5 6.1 WS-C3850-48XS 16.42 7.45 C3850-NM-4-1G 0.66 0.30 C3850-NM-2-10G 0.71 0.32 C3850-NM-4-10G 0.75 0.34 C3850-NM-8-10G 0.74 0.34 C3850-NM-2-40G 0.62 0.28 MTBF hours WS-C3850-12S 315,840 WS-C3850-24S 300,760 WS-C3850-24T 303,230 WS-C3850-24P 269,450 WS-C3850-24U 237,310 WS-C3850-48T 303,660 WS-C3850-48P 241,050 WS-C3850-48F 241,050 WS-C3850-48U 205,110 WS-C3850-24XU 203,150 WS-C3850-12X48U 202,030 WS-C3850-12XS 371,440 WS-C3850-24XS 307,990 WS-C3850-32XS 307,990 WS-C3850-48XS 286 900 PWR-C1-350WAC 580 710 PWR-C1-715WAC 664 055 PWR-C1-1100WAC 392 174 PWR-C1-440WDC 469,350 C3850-NM-4-1G 7,052,100 C3850-NM-2-10G 4,4,4, 315 970 C3850-NM-4-10G 3,835,330 C3850-NM-8-10G 6,544,410 C3850-NM-2-40 Диапазоны окружающей средыG 9,303,100 с кондиционером Операционная среда и высота Нормальная температура эксплуатации и высоты: -5oC до 45oC, до 5000 футов (1500 м) до 10 000 футов (3000 м) - Минимальная температура окружающей среды для холодного старта составляет 32 градусов по Фаренгейту (0 градусов по Цельсию) Краткосрочные исключительные условия : -5oC до 50oC, до 5000 футов (1500 м) - от -5oC до 45oC, до 10000 футов (3000 м) - от -5oC до 45oC, на уровне моря с одним more than after in one year: 96 hours in a row, or 360 hours in total, or 15 cases. With dc power operating environment and altitude (NEBS) Normal temperature and height work: -5oC to 45oC, up to 6,000 feet (1,800 m) - from -5oC to 40oC, up to 10,000 feet (3,000 m) to 13,000 feet (4,000 m) Short-term exceptional conditions: -5oC to 55oC, up to 6,000 feet (1,800 m) - from -5oC to 50oC, up to 10,000 feet (3,000 m) to 13,000 feet (4,000 m) - from -5oC to 45oC, at sea level with one fan failure No more than following in one year: 96 hours in a row, or 360 hours in total, or 15 cases. Relative humidity from 10% to 95%, non-condinsing acoustic noise is measured on ISO 7779 and declared in ISO 9296 Observer Positions, working with an ambient temperature of 25 degrees Celsius with air conditioning or DC power (with 24 PoE' ports loaded): LpA: 43dB typical, 45dB Maximum 5.5B Maximum Typical: Noise Radiation for a typical Maximum configuration: Statistical maximum to account for changes in storage environment Production Temperature: -40oC to 70oC Height: 15,000 feet Vibration Operating: 0.. 41Grms from 3 to 500 Hz with spectral break points of 0.0005 G2/Hz by 10 Hz and 200Hz 5dB/octave roll off at each end. Unworkable: 1.12Grms from 3 to 500 Hz with spectral break points of 0.0065 G2/Hz at 10Hz and 100Hz 5dB/octave roll off at each end. Shock: 30G, 2ms half sineoids: 55G, 10ms trapezoidal connectors for Cisco Catalyst 3850 Series Table 12 shows supported connectors. Table 12. Connectors Connectors and cabling ● 1000BASE-T ports: RJ-45 connectors, 4-pair Cat-5E UTP cabling ● Multigig-T ports: RJ-45 connectors, 4-pair Cat-5E, Cat-6, Cat6A UTP cabling ● 1000BASE-T SFP-based ports: RJ-45 connectors, 4-pair Cat-5E UTP cabling ● 100BASE-FX, 1000BASE-SX, -LX/LH, -ZX, -BX10, DWDM and CWDM SFP transceivers: LC fiber connectors (single-mode or multimode fiber) ● 10GBASE-SR, LR, LRM, ER, ZR, DWDM SFP+ transceivers: LC fiber connectors (single-mode or multimode fiber) ● CX1 cable assemblies: SFP+ connector ● Cisco StackWise-480 stacking ports: copper-based Cisco StackWise cabling ● Cisco StackPower: Cisco proprietary power stacking cables ● Ethernet management port: RJ-45 connectors, 4-pair Cat-5 UTP cabling ● Management console port: RJ-45-to-DB9 cable for PC connections Power connectors ● Customers can provide power to a switch by using either the internal power or StackPower from another member in the power stack. The connectors are located at the back of the switch. Internal power connector: The internal power supply is an automatic power supply. The internal power source supports the input voltage from 100 to 240VAC. Use the AC power cord to connect разъем питания к розетке переменного тока. Для получения последней информации о совместимости трансиверного модуля Cisco обратитесь к . Поддержка управления и стандартов для Cisco Catalyst 3850 Series Switches Таблица 13 показывает поддержку управления и стандартов для серии Cisco Catalyst 3850. Таблица 13. Management and standards support for the Cisco Catalyst 3850 Series Description Specification Management BRIDGE-MIB CISCO-AUTH-FRAMEWORK-MIB CISCO-BGP4-MIB, BGP4-MIB CISCO-BRIDGE-EXT-MIB 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-UDLDP-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 СТАРЫЙ-CISCO-ПАМЯТЬ-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-MM SNMP-VIEW-BASED-ACM-MIB TCP-MIB UDP-MIB CISCO-IMAGE-MIB CISCO-STACKWISE-MIB AIRESPMACE-WIRELESS-MIB CISCO-LWAPP-IDS-MIB CISCO-LWAPP-AP-MIB CISCO-LWAPP-CCX-RM-MIB CISCO-LWAPP-11-CCX-КЛИЕНТ-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-LINKTEST-MIB LWAPP-MFP-MIB CISCO-LWAPP-MOBILITY-EXT-MIB CISCO-LWAPP-ЗОС-МИБ CISCO-LWAPP-REAP-MIB CISCO-LWAPP-ROGUE-MIB CISCO-LWAPP-RRM-MIB CISCO-LWAPP-SI-MIB CISCO-LWAPP-LWAPP-TS-TS Стандарты IEEE 802.1as IEEE 802.1s IEEE 802.1w IEEE 802.11 IEEE 802.1x IEEE 802.1x-Rev IEEE802.3ad IEEE 802.3af IEEE 802.3at IEEE 802.3bz IEEE 802.3x полный дуплекс на 10BASE-T, 100BASE-TX, и 1000 ПОРТОВ БАЗЫ-T IEEE 802.1D Spanning Tree Protocol IEEE 802.1p CoS приоритеты IEEE 802.1'at Протокол бронирования потока IEEE 802.1'av IEEE 802.1' VLAN IEEE 80 2.3 10BASE-T спецификация IEEE 802.3u 100BASE-TX спецификация IEEE 802.3ab 1000BASE-T спецификация IEEE 802.3z 1000BASE-X спецификация RMON I и II стандарты SNMPv1, SNMPv2c и спецификации питания SNMPv3 Таблица 14 перечисляет спецификации питания для серии Cisco Catalyst 3850 в зависимости от вида используемого питания. Таблица 14. Power specifications for Cisco Catalyst 3850 Series Description Specification PWR-C1-1100WAC PWR-C1-715WAC PWR-C1-350WAC PWR-C1-440WDC Power supply rated maximum 1100W 715W 350W 440W Total output BTU (Note: 1000 BTU/hr = 293W) 3793 BTU/hr, 1100W 2465 BTU/hr, 715W 1207BTU/hr, 350W 1517BTU/hr, 440W Input-voltage range and frequency 115-240VAC, 50-60 Hz 100-240VAC, 50-60 Hz 100-240VAC, 50-60 Hz -36VDC to -72VDC Input current 12-6A 10-5A 4-2A <8A at= -72vdc=></8A> <16A at= -36vdc= output= ratings= -56v= at= 19.64a= -56v= at= 12.8a= -56v= at= 6.25a= -56v= at= 7.86a= output= holdup= time= 10= ms= minimum= at= 102.5vac= 16.7= ms= minimum= at= 100vac= 16.7= ms= minimum= at= 100vac=>2ms at -48VDC Power-supply input receptacles IEC 320-C16 (IEC60320-C16) IEC 320-C16 (IEC60320-C16) IEC 320-C16 (IEC60320-C16) Terminal strip Power cord rating 13A 13A 10A 20A at 100VDC Physical specifications (H x W x D) : 1.58 X 3.25 X 13.7 in Weight: 3 lb (1.4 kg) (H x W x D): 1.58 X 3.25 X 12.20 in Weight : 2.8 lb (1.3 kg) (H x W x D): 1.58 X 3.25 X 12.20 in Weight: 2.6 lb (1.2 kg) (H x W x D): 1.58 X 3.25 X 12.20 in Weight: 2.6 lb (1.2 kg) Operating temperature 23 to 113°F (-5 to 45°C) Storage temperature -40 to 158°F (-40 to 70°C) Relative humidity operating and nonoperating noncondensing 5 to 90% noncondensing Altitude 10,000 ft. (3000 meters), up to 45°C MTBF Calculated MTBF must be greater than 300,000 using Telcordia SR-332, Method 1, Case 3. Продемонстрировано MTBF составляет 500 000 часов (с 90% уровнем доверия). EMI и EMC соответствия FCC Часть 15 (CFR 47) Класс A ICES-003 Класс EN 55022 Класс A CISPR 22 Класс A/H3C 3548 Класс A BSMI (только входные модели переменного тока) VCCI Класса EN 55024, EN300386, EN 50082-1, EN 61000-3-2, EN 61000-3-3 EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN 61000-6-1 Соответствие требованиям безопасности UL 60950-1, CAN/CSA-C22.2 No 60950-1, EN 60950-1, IEC 60950-1, CCC, CE Маркировка светодиодные индикаторы AC OK: Входная мощность в источник питания в OK PS OK: Выходная мощность от питания OK Потребление энергии автономного Cisco Catalyst 3850 Серия переключатели Таблица 15 показывает потребление энергии автономных Catalyst 3850 Series of Switches based on the Alliance for Telecommunications Solutions (ATIS) tested using IMIX traffic flow distribution, with a voltage input of 115VAC at 60 Hz and no PoE download. Values are as much as possible in line with relevant test scenarios. Table 15. Power consumptions (in watts) of standalone Cisco Catalyst 3850 Series Model Uplink module Power consumption (W) (no more than) 0% traffic 10% traffic 100% traffic Weighted average WS-C3850-12S C3850-NM-4-1G 85.84 85.89 86.75 86.0 WS-C3850-24S 104.48 104.25 105.12 104.4 WS-C3850-12S C3850-NM-2-10G 87.95 88.30 90.04 88.4 WS-C3850-24S 106.24 106.58 109.75 106.9 WS-C3850-24T C3850-NM-4-1G 83.47 82.86 83.76 83.04 WS-C3850-24P 86.81 86.22 87.11 86.40 WS-C3850-24U 81.5 81.4 82.1 81.5 WS-C3850-48T 117.74 116.62 117.59 116.89 WS-C3850-48P 125.35 124.15 125.15 124.43 WS-C3850-48F 130.10 128.91 129.85 129.18 WS-C3850-48U 114.8 114.7 115.6 114.8 WS-C3850-24T C3850-NM-2-10G 81.97 81.83 84.97 82.16 WS-C3850-24P 85.22 85.04 88.32 85.39 WS-C3850-24U 82.8 82.6 84.8 82.9 WS-C3850-48T 117.56 116.74 120.40 117.23 WS-C3850-48P 123.78 122.90 126.75 123.42 WS-C3850-48F 129.89 129.06 132.36 129.18 WS-C3850-48U 116.8 116.9 119.9 117.2 WS-C3850-48T C3850-NM-4-10G 120.56 120.28 127.24 121.02 WS-C3850-48P 129.59 129.64 135.96 130.27 WS-C3850-48F 137.57 137.06 143.77 137.81 WS-C3850-48U 119.9 121.2 127.7 121.5 WS-C3850-12XS 109.0 109.5 112.7 109.7 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 1 177.0 162.5 WS-C3850-48XS No 267.0 268.3 288.1 270.1 Security and Table 16 compliance. Информация о безопасности и соответствии требованиям для сертификатов безопасности серии Cisco Catalyst 3850 UL 60950-1 Second Edition CAN/CSA-C22.2 No. 60950-1 Второе издание EN 60950-1 Второе издание IEC 60950-1 Второе издание NOM (получено партнерами и дистрибьюторами) Электромагнитные сертификаты выбросов 47CFR Часть 15 (CFR 47) Класс A (FCC Часть 15 Класс A) AS/N'S CISPR22 Класс A CISPR22 класс EN55022 КЛАСС A ICES003 Класс VCCI класса EN61000-3-2 EN61000-3-3 KN22 класса KCC CNS13438 Класс EN55024 CISPR24 КН24 Экологические сокращения опасных веществ (ROHS) 5 Шум спецификации Office Product Spec: 48dBA при 30 градусов по Цельсию (ссылка на ISO 7779) Telco CLEI код Гарантия Cisco Catalyst 3850 серии переключатели приходят с E-LLW, который включает в себя NBD доставки замены оборудования, где это доступно и 90 дней 8x5 Cisco TAC поддержки. Your official warranty statement, including the warranty applicable to Cisco software, appears in the Cisco information package that accompanies your Cisco product. We encourage you to carefully review the warranty statement sent to your specific product before use. Cisco reserves the right to return the purchase price as an exclusive guarantee. For more information about conditions, visit . Table 17 contains information about E-LLW. Table 17. The E-LLW parts Cisco E-LLW device covers applied to the Cisco Catalyst 3850 series of switches. Guarantee duration as long as the original customer owns the product. EoL's policy in the event of a discontinuation of production is limited to 5 years after the announcement of the discontinuation of production. Replacing Cisco equipment or its service center will use commercially reasonable efforts to send a replacement to deliver NBD where necessary. Otherwise, the replacement will be sent within 10 business days after receiving the RMA request. The actual delivery time may vary depending on the customer's location. The effective hardware warranty date begins with the date of shipment to the customer (and in the case of a Cisco reseller, no more than 90 days after the initial shipment of Cisco). TAC Cisco will provide support during business hours, 8 hours per day, 5 days per week of basic configuration, diagnostics, and fixable device-level issues for up to 90 days from the date of shipment of the originally purchased Cisco Catalyst 3850 product. This support does not include a network-level solution or support outside of a specific device under consideration. Cisco.com access guarantees access to guests only Cisco.com. Licensing three feature sets available with all Cisco Catalyst 3850 Switches: LAN Base: Enterprise Access Layer 2 switch features - IP Base: Enterprise Access Layer 3 Switch features : Advanced Corporate Layer 3 Switch (IPv4 and IPv6) feature feature set LAN Base offers advanced intelligent services that include a comprehensive layer of 2 features, with up to 255 VLANs. Base IP features provide entry-level enterprise services in addition to all LAN Base features with 1K VLANs. IP Base also includes support for wireless controller functionality (the role of a mobility agent and mobility controller; an additional current access license required for the role of mobility controller), route access, smart operations, FNF, and so on. The IP Services feature suite provides complete 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 mHO-based ZOS. Cisco Catalyst 3850 series switches with LAN Base feature set can only be stacked with other Cisco Catalyst 3850 LAN-based switches. The same applies to IP and IP services. A mixed lan-base switch stack with IP Base or IP services features is not supported. Models based on the 12-port and 24-port SFP and SFP, and The 48-port SFP can only be ordered with IP Base licenses or IP services. So, in order to fit in with the LAN Base models, they have to be IN LAN Base mode from CLI. Customers can transparently update the software feature installed in Cisco Catalyst 3850 series of switches through Cisco iOS Software CLI using The Right to Use (RTU) through the software update process. The activation of the software allows cisco iOS Software features. Depending on the type of license Cisco iOS Software activates the appropriate set of functions. License types can be modified or updated to activate a different set of features. A hotspot license for the Cisco Catalyst 3850 Series License hotspot is required for the Cisco Catalyst 3850 series of switches running in mobility controller mode. An access point license is not required for 3850 operating in mobility agent mode. This functionality is included in the IP base feature set. Other devices that can act as a mobility controller are the WLC 5760, WLC 5508, and WiSM2 wireless controllers. Access current licenses can only be transferred between 2 3850 switches or between 3850 and 5760 by the regulator and vice versa. The software policy for Cisco Catalyst 3850 Series switches customers from Cisco Catalyst LAN Base and IP Base software feature kits will be provided with maintenance updates and bug fixes designed to maintain compliance with software with published specifications, release notes, and industry compliance standards as long as the original end user continues to own or use the product or up to one year from the end of the sale of this product depending on what happens before. Customers with licenses for our IP software require a contract to support services such as Cisco Smart Net Total Care™ Service to download updates. This policy assures any previous warranty or policy statement and may be changed without notice. Cisco ONE Software Cisco ONE Switch Access Software is available for Cisco Catalyst 3850 series of switches. Cisco ONE Software is a new way for customers to acquire and use our infrastructure software. It offers a simplified consumption model focused on general customer scenarios in the data center, WANs and LANs. Cisco ONE Software and Services provide customers with four main advantages: - Software packages that relate to typical customer usage scenarios at an attractive price - Investment protection of their software purchases through software-enabled license portability - Access to current innovations and new technologies with Cisco Software Support Service (SWSS) - Flexible licensing models for the smooth distribution of customer software spent over time on custom information for Cisco ONE Software for Cisco Cisco and partner services provide an innovative, secure and intellectual advantage in the architecture of a limitless network using Cisco's personalized services and and Partners. Through a discovery process that begins with understanding your business goals, we help you integrate next-generation Cisco Catalyst fixed switches into architecture and incorporate network services onto that platform. By sharing knowledge and best practices, we support your success in every step of the way to deploy, absorb, manage, and scale new technologies. Choose from a flexible set of support services designed to meet your business needs and help you maintain a high network performance by controlling operating costs. (See table 18.) Table 18. The technical services available for Cisco Catalyst 3850 Series switches the technical services of Cisco Smart Net Total Care™ Service and Service - 24 hours a day, Global Access to Cisco TAC - Unlimited access to extensive knowledge and tools Cisco.com - Replacing and installing spare parts in the next business, 8x5x4, 24x7x4 and 24x7x2 advance hardware replacement and replacement and installation of parts on site - Current software updates operating system within the license suite of features - Active Diagnostics and Real-Time Alerts on Devices Supported Home with Cisco Smart Foundation Service Pre-replacement equipment as available - Access to SMB TAC (access levels vary by region) - Access to knowledge base Cisco.com SMB - Online technical resources via Smart Foundation Portal portal - Operating System Bug Fixes and Cisco S Base Service Patches - Round-the-Clock, Global Access to Cisco TAC - Registered Access to Cisco.com - NB , 24x7x4, and 24x7x2 advance equipment replacement; Return to Factory Option Available 2 - Current Software Updates Operating System 1 Cisco Focused Technical Support Service - Three Premium Levels, High-end Services Available: ◦ Cisco High-Touch Operations Management Service ◦ Cisco High-Touch Technical Support Service ◦ Cisco High-Touch Engineering Service - Valid Cisco Smart Net Total Care or SP Basic Contracts for all network equipment required Notes 1Cisco operating system updates include the following operating system updates : maintenance releases, minor updates, and major upgrades in a licensed feature set. 2 Pre-replacement equipment is available in a variety of service level combinations. For example, 8x5xNBD indicates that shipments will start during a standard 8-hour workday, 5 days a week (generally accepted working days in the region concerned), with NBD delivery. In cases where NBD is unavailable, the vessel is provided on the same day. Restrictions apply; For more information, check out the relevant Services. The 19 information order table lists the order information for the Cisco Catalyst 3850 series. To place an order, visit Cisco Ordering's homepage Таблица 19. Cisco Catalyst 3850 Серия заказ информации Описание номера продукта Cisco Catalyst 3850 Серии WS-C3850-24T-L Stackable 24 10/100/1000 порты Ethernet, с 350WAC питания 1 RU, LAN-база набор функций (StackPower кабели должны быть приобретены отдельно) WS-C3850-48T-L Stackable 48 10/100/1000 Ethernet портов, с 350WAC питания 1 RU, Набор функций LAN Base (кабели StackPower должны быть приобретены отдельно) WS-C3850-24P-L Stackable 24 10/100/1000 порты Ethernet PoE, с 715WAC питания 1 RU, Набор функций LAN Base (кабели StackPower должны быть приобретены отдельно) WS-C3850-24U-L Stackable 24 10/100/1000 Ethernet UPOE порты, с 1100WAC питания 1 RU, LAN-база набор функций (StackPower кабели должны быть приобретены отдельно) WS-C3850-48P -L Stackable 48 10/100/1000 Ethernet PoE' порты, с 715WAC питания 1 RU, LAN-база набор функций (StackPower кабели должны быть приобретены отдельно) WS-C3850-48F-L Stackable 48 10/100/1000 Ethernet PoE , with 1100WAC power supply 1 RU, LAN Base feature set (StackPower cables need to be purchased separately) WS-C3850-48U-L Stackable 48 10/100/1000 Ethernet UPOE ports, with 1100WAC power supply 1 RU, LAN Base feature set (StackPower cables need to be purchased separately) WS-C3850-24T-S Stackable 24 10/100/1000 Ethernet ports, with 350WAC power supply 1 RU, IP Base feature set WS-C3850-48T-S Stackable 48 10/100/1000 Ethernet ports, with 350WAC power supply 1 RU, IP Base feature set WS-C3850-24P-S Stackable 24 10/100/1000 Ethernet PoE+ ports, with 715WAC power supply 1 RU, IP Base feature set WS-C3850-24U-S Stackable 24 10/100/1000 Ethernet UPOE ports, with 1100WAC power supply 1 RU, IP Base feature set WS-C3850-48P-S Stackable 48 10/100/1000 Ethernet PoE+ ports, with 715WAC power supply 1 RU, IP Base feature set WS-C3850-48F-S Stackable 48 10/100/1000 Ethernet PoE+ ports , с 1100WAC питания 1 RU, IP-база функция набор WS-C3850-48U-S Stackable 48 10/100/1000 Ethernet UPOE портов, с 1100WAC питания 1 RU, IP-база функция набор WS-C3850-24T-E Stackable 24 10/100/1000 Ethernet портов, с 350WAC питания 1 RU, Функция IP-услуг набор WS-C3850-48T-E Stackable 48 10/100/1000 Ethernet портов, с 350WAC питания 1 RU, IP-услуги набор WS-C3850-24P-E Stackable 24 10/100/1000 Ethernet PoE, порты, с 715WAC питания 1 RU, IP Услуги функция набора WS-C3850-24U-E Stackable 24 10/100/1000 Ethernet UPOE портов, с 1100WAC питания 1 RU, IP Услуги функция набора WS-C3850-48P-E Stackable 48P 8 10/100/1000 Порты Ethernet PoE, с 715WAC питания 1 RU, IP Услуги функция набора WS-C3850-48F-E Stackable 48 10/100/1000 Ethernet PoE' порты, с 1100WAC питания 1 RU , Функция IP-услуг набор WS-C3850-48U-E Stackable 48 10/100/1000 Ethernet UPOE портов , с 1100WAC питания 1 RU, IP Услуги функция набора WS-C3850-12X48U-L Stackable 48 10/100/1000 с 12X48U-L Stackable 48 10/100/1000 с 12X48U-L Stackable 48 10/100/1000 Gbps UPOE Ethernet ports, with 1100W AC power supply 1RU, LAN Base feature set WS-C3850-12X48U-S Stackable 48 10/100/1000 with 12 100Mbps/1/2.5/5/10 Gbps UPOE Ethernet ports, with 1100W AC power supply 1RU, IP Base feature set WS-C3850-12X48U-E Stackable 48 10/100/1000 with 12 100Mbps/1/2.5/5/10 Gbps UPOE Ethernet ports, with 1100W AC power supply 1RU, IP Services feature set WS-C3850-24XU-L Stackable 24 100Mbps/1/2.5/5/10 Gbps UPOE Ethernet ports, with 1100W AC power supply 1RU, LAN Base feature set WS-C3850-24XU-S Stackable 24 100Mbps/1/2.5/5/10 Gbps UPOE Ethernet ports, with 1100W AC power supply 1RU, IP Base feature set WS-C3850-24XU-E Stackable 24 100Mbps/1/2.5/5/10 Gbps UPOE Ethernet ports, with 1100W AC power supply 1RU, IP Services feature set WS-C3850-12S-S Stackable 12 SFP Ethernet ports , с 350WAC питания 1 RU, IP-база функция набор WS-C3850-12S-E Stackable 12 SFP Ethernet портов, с 350WAC питания 1 RU, IP Услуги функция набора WS-C3850-24S-S Stackable 24 SFP Ethernet портов, с 350WAC питания 1 RU, IP-база функция набор WS-C3850-24S-E Stackable 24 SFP Ethernet портов, с 350WAC питания 1 RU, IP-услуги набор WS-C3850-12XS-S Stackable 12 SFP' Ethernet портов, с 350WAC питания 1 RU, IP-база функция набор WS-C3850-12XS-E Stackable 12 SFP' Ethernet портов, с 350WAC питания 1 RU, IP-услуги функция набора WS-C3850-24XS-S Stackable 24 SFP Порты Ethernet, с 715WAC питания 1 RU, IP-база функция набор WS-C3850-24XS-E Stackable 24 SFP' Ethernet портов, с 715WAC питания 1 RU, IP Услуги функция набора 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 bundles 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 24 100 Мбит/с/1/2.5/5/10 Гбит/с и 5 лицензий ip-лицензий IP Base WS-C3850-12X48UW-S Cisco Catalyst 3850 48 Port UPOE с 12X48UW-S Cisco Catalyst 3850 48 Port UPOE с 12X48UW-S Cisco Catalyst 3850 48 Port UPOE с 12X48UW-S Cisco Catalyst 3850 48 Port UPOE 2 100 Мбит/с/1/2.5/5/10 Гбит/с и 5 лицензий точки доступа IP Base WS-C3850-16XS-S Cisco 3850 12 portable SFP model, C3850-NM-4-10G module and Power. 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. 1 RU, IP service 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. 1 RU, IP Услуги функция набора Сетевые модули для Cisco Catalyst 3850 Серии C3850-NM-4-1G' 4 x Гигабит Ethernet сетевой модуль запасных C3850-NM-2-10G' 4 x Gigabit Ethernet/2 x 10 Gigabit Ethernet сетевой модуль запасных C3850-NM-BLANK' Сетевой модуль пустой запасной C3850-NM-NM 4-10G' 4 x Gigabit Ethernet/4 x 10 Gigabit Ethernet сетевой модуль запасных C3850-NM-8-10G 8 x Гигабит Ethernet/8 x 10 Гигабит Ethernet сетевой модуль запасных C3850-NM-2-40G 2 x 40 Гигабит Ethernet сетевой модуль запасных лицензий программного обеспечения C3850-12-S-E Cisco Catalyst 3850 12-порт IP-базы IP Услуги RTU бумажная лицензия C3850-24-L-S Cisco Catalyst 3850 24-порт переключатель LAN базы IP-базы RTU бумажной лицензии C3850-48-L-S Cisco Catalyst 3850 48-порт переключатель LAN базы IP-базы RTU бумаги лицензия C3850-24-L-E Cisco Catalyst 3850 24-порт LAN База IP Услуги RTU бумажная лицензия C3850-48-L-E Cisco Catalyst 3850 48-порт LAN База IP Услуги RTU бумажная лицензия C3850-24-S-E Cisco Catalyst 3850 24-порт IP-базы для IP-услуг RTU бумажная лицензия C3850-48-S-E Cisco Catalyst 3850 48-порт IP Base IP Services RTU Paper License L-C3850-24-L-S Cisco Catalyst 3850 24-port LAN base IP base RTU electronic license L-C3850-48-L-S Cisco Catalyst 3850 48-port LAN Base IP Base RTU electronic license L-C3850-24-L-E-Cisco Catalyst 385 0 24-port LAN Base IP Services RTU Electronic License L-C3850-48-L-E Cisco Catalyst 3850 48-port LAN base IP Services RTU electronic license L-C3850-24-S-E Cisco Catalyst 3850 24-port IP base for IP-services RTU electronic license L-C3850-48-48-48-48-48-48-48-48-48-48-48-48-48-48-48-48-48-port IP base for IP-services RTU electronic license L-C3850-48-48-48-48-48-48-port IP-base for IP-services RTU electronic license L-C3850-48-48-48-48-48-port IP base for IP-services RTU electronic license L-C3850-48-48-48-48-48-48-S-E Cisco Catalyst 3850 48-port IP-based IP-based IP services RTU electronic license L-C3850-12-S-E Cisco Catalyst 3850 12-port IP Base IP for IP services RTU electronic license Access license L-LIC-CT38 50-UPG Primary license to upgrade SKU for Cisco 3850 wireless controller (electronic) L-LIC-CTIOS-1A 1 Hotspot Adder License for Cisco iOS Software Based wireless controller (electronic delivery) LIC-CT3850-UPG Initial SKU Update License for Cisco 3850 Wireless Controller (Paper License) LIC-CTIOS-1A 1 Access Point Adder License to Cisco IOS Software Wireless Controller (License) Power Sources and Fan for Fan Cisco Catalyst 3850 Series PWR-C1-350WAC 350WAC Power Spare PWR-C1-715WAC 715WAC Power Spare PWR-C1-1100WAC 1100WAC Power Spare PWR-C1-440WD 440WD Power Spare PWR-C1-BLANK' power-empty spare PWR-C3-750WAC-R' 750WAC supply of spare spare stock airflow for 48XS PWR-C3-750WAC-F= 750WAC power supply spare back-to-front airflow for 48XS PWR-C3-750WDC-R= 750WDC power supply spare front-to-back airflow for 48XS PWR-C3-750WDC-F= 750WDC power supply spare back-to-front airflow for 48XS FAN-T3-R= Fan module spare front-to-back airflow for 48XS FAN-T3-F= Fan module spare back-to-front airflow for 48XS C3850-FAN-T1= Cisco Catalyst 3850 and WLC 5760 Type 1 Fan Module StackWise-480 and StackPower cables for the Cisco Catalyst 3850 Series STACK-T1-50CM= Cisco StackWise-480 50cm stacking cable spare STACK-T1-1M= Cisco StackWise-480 1m stacking cable spare STACK-T1-3M= Cisco StackWise-480 3m stacking cable spare CAB-SPWR-30CM= Cisco Catalyst 3850 StackPower cable 30cm spare CAB-SPWR-150CM= Cisco Catalyst 3850 StackPower cable 150cm spare Spare power cords for the Cisco Catalyst 3850 Series CAB-TA-NA= AC power cord for Cisco Catalyst 3850 (North America) CAB-TA-AP= AC power cord for Cisco Catalyst 3850 (Australia) CAB-TA-AR= AC power cord for Cisco Catalyst 3850 (Argentina) CAB-TA-SW= AC power cord for Cisco Catalyst 3850 (Switzerland) CAB-TA-UK= AC power cord for Cisco Catalyst 3850 (United Kingdom) Шнур питания CAB-TA-JP- AC для Cisco Catalyst 3850 (Япония) CAB-TA-250VAC-JP- Япония 250VAC шнур питания для Cisco Catalyst 3850 (Япония) CAB-TA-EU AC шнур питания для Cisco Catalyst 3850 (Европа) CAB-TA-Шнур питания переменного тока для Cisco Catalyst 3850 (Италия) CAB-TA-IN AC шнур питания для Cisco Catalyst 3850 (Индия) CAB-TA-CN' AC шнур питания для Cisco Catalyst 3850 (Китай) CAB-TA-DN' AC шнур питания для Cisco Catalyst 3850 (Дания) Шнур питания переменного тока CAB-TA-IS' для Cisco Catalyst 3850 (Израиль) CAB-ACB-12A-AC шнур питания для Cisco Catalyst 3850 (Бразилия), 12A/125V BR-3-20 подключить до 12A CAB -ACB-10A' AC шнур питания для Cisco Catalyst 3850 (Бразилия), 10A/250V BR-3-10 подключить до 10A CAB-C15-CBN Кабинет перемычки шнур питания, 250 VAC 13A, Разъемы C14-C15 Запасные аксессуары и стойки монтаж комплекты для Cisco Catalyst 3850 серии C3850-ACC-KIT' Аксессуар комплект для Cisco Catalyst 3850 серии C3850-RAC-KIT' Стойка монтаж комплект для Cisco Catalyst 3850 Серия C3850-4PT-KIT' Расширение рельсы и скобки для четырехточекового монтажа для Cisco Catalyst 3850 Серия C3850-4PT-KIT' Расширение рельсы и скобки для четырехточек монтажа для Cisco Catalyst 3850 Серия C3850-4PT-KIT Серия Cisco Catalyst 3850 поддерживает широкий спектр оптики. Поскольку список поддерживаемых оптик обновляется на регулярной основе, обратитесь к таблицам, доступным здесь для получения последней информации о совместимости sFP, SFP и SFP: . Гибкие платежные решения Cisco Capital помогут вам достичь поставленных целей. Cisco Capital упрощает поиск нужных технологий для достижения поставленных целей, позволяет трансформацию and helps to stay competitive. We can help you reduce your total cost of ownership, save capital, and accelerate growth. In more than 100 countries, our payment solutions can help you purchase hardware, software, services, and additional third-party hardware in simple and predictable payments. Learn more. More. veteran mod apk android 9

demufozijufef.pdf