

intelbras



Intelbras Campus Switches SC 5530 Series



Product overview

Intelbras SC 5530 series switches provide industry-leading high performance and scalable 10GE/25GE access switching solution with modular dual power, fixed uplinks (40GE/100GE) and IRF for resiliency. The series offers OSPF/BGP, multicast and flexible management.

The SC 5530 switch series contains the following models:

Product Description	Product Photograph
<ul style="list-style-type: none"> SC 5530-24Y-8H: 24×10GE/25GE SFP28 Ports, 8×40GE/100GE QSFP28 Ports, 5×fan tray slots, and 2×power module slots. 	
<ul style="list-style-type: none"> SC 5530-48Y-8H: 48×10GE/25GE SFP28 Ports, 8×40GE/100GE QSFP28 Ports, 5×fan tray slots, and 2×power module slots 	

Features and benefits

Green Technology

Intelbras SC 5530 series switches utilize the latest power-saving chips and innovative architectural design solutions to achieve the lowest power consumption among gigabit switches, providing users with environmentally friendly, cost-effective and low-power network access products energy, reducing user maintenance costs. At the same time, Intelbras SC 5530 series switches adopt various environmentally friendly energy-saving designs, including automatic power off (automatic port power saving). If the status of the interface is always inactive for a period of time, the system will automatically stop supplying power to the interface and automatically enter power-saving mode. Support Efficient Ethernet (EEE) power saving function on an Ethernet interface on RJ-45 ports and low power consumption operations for industry. If the port is inactive for a period of time, the system will set the port in power saving mode, and when there is

a packet to be sent and received, the port will be activated to resume services through the monitoring code sent regularly to achieve the energy saving effect. Meet EU RoHS standard for environmental protection and material safety.

Professional Surge Protection Function

The Intelbras SC 5530 series switches utilize professional built-in surge protection technology and support industry-leading service port surge protection capability, which significantly reduces the rate of damage caused by equipment surges, even in power environments. adverse work.

High-density 10GE/25GE forwarding

The switch offers high-density 10GE/25GE forwarding. It provides powerful hardware forwarding capacity and abundant campus features. It provides up to 48/24*1GE/10GE/25GE autosensing SFP28 ports and 8*100G ports. The switch supports modular power modules and fan trays. By using different fan trays, the switch can provide field changeable airflows.

Embedded Access Controller

Intelbras SC 5530 implements the WLAN function by installing an AC feature pack on the main control unit, thereby implementing both the wired function and the WLAN function on a single device. Embedded AC is a low-cost WLAN solution, save overall investment, improve forwarding capacity, realized a true unified wired and wireless solution in Campus. Max 2K AP supported on one single switches.

Intelbras Intelligent Resilient Framework 2 (IRF2)

Intelbras Intelligent Resilient Framework 2 (IRF 2) virtualizes multiple SC 5530 switches into one virtual switch and provides the following benefits:

- **Scalability—IRF 2** allows you to add devices to the IRF 2 system easily. It provides a single point of management, enables switch plug-and-play, and supports software auto-update for software synchronization from the master to the new member devices. It brings business agility with lower total cost of ownership by allowing new switches to be added to the fabric without network topology change as business grows.
- **High availability**—The Intelbras proprietary routing hot backup technology ensures redundancy and backup of all information on the control and data planes and non-stop Layer 3 data forwarding in an IRF 2 fabric. It also eliminates single point of failure and ensures service continuity.
- **Redundancy and load balancing**—The distributed link aggregation technology supports load sharing and mutual backup among multiple uplinks, which enhances the network redundancy and improves link resources usage.
- **Flexibility and resiliency**—The switch uses standard GE ports instead of specialized ports for IRF links between IRF member devices. This allows customers to assign bandwidth as needed between uplink, downlink, and IRF system connections. In addition, an SC 5530 IRF fabric can span a rack, multiple racks, or multiple campuses.

Wide range of advanced features

The switch offers a wide range of features, including:

- **Modular hardware and software design:** The switch uses modular, hot swapping, and redundancy design for hardware, including power modules and fan trays. The switch also uses modular design for software, which enables feature installation and removal on an as-needed basis. Refined physical architecture and optimized software workflows greatly reduce the end-to-end packet processing delay.
- **Virtual eXtensible LAN (VXLAN):** A MAC-in-UDP technology that provides Layer 2 connectivity between distant network sites across an IP network. VXLAN enables long-distance virtual machine and data mobility and is typically used in data centers and the access layer of campus networks for multitenant services. The Intelbras implementation of VXLAN supports automatic VXLAN tunnel establishment with EVPN.
- **Ethernet Virtual Private Network (EVPN)** is a Layer 2 VPN technology that provides both Layer 2 and Layer 3 connectivity between distant network sites across an IP network. EVPN uses MP-BGP in the control plane and VXLAN in the data plane. EVPN provides the following benefits: Configuration automation; Separation of the control plane and the data plane; Integrated routing and bridging (IRB).
- **In-Service Software Upgrade (ISSU)** and Operation, Administration, and Maintenance (OAM)—Ensure business continuity and improve Ethernet management and maintainability.

Comprehensive security control policies

The switch supports AAA authentications (including RADIUS authentication) and dynamic or static binding of user identifiers such as user account, IP address, MAC address, VLAN, and port number. Using the switch in conjunction with Intelbras, you can manage and monitor online users in real time and take prompt action on illegitimate behaviors.

The switch offers a large number of inbound and outbound ACLs and VLAN-based ACL assignment. This simplifies configurations and saves ACL resources.

MACsec

MACsec is an ideal hop-by-hop link-layer security protocol for Ethernet networks, which are typically insecure. It provides the following services:

- **Data encryption:** Encrypts data over the Ethernet link to protect data against security issues such as eavesdropping.
- **Anti-replay:** Prevents packets from being intercepted and modified on the route to protect the network against unauthorized access.
- **Tampering protection:** prevents packet tampering to protect data integrity.

MACsec supports the following deployments:

- **Client-oriented:** Protects data transmission over the link between the client and its access device.

- **Device-oriented mode:** Protects data transmission over the link between two peering devices.

High availability

In addition to node and link protection, the switch offers the following hardware high availability features:

- 1+1 power module redundancy and 5 fan tray redundancy.
- Automatic power and fan tray status monitoring and alarming mechanisms.
- Automatic fan speed adjustment based on the change in temperature.
- Self-protection mechanisms that protect power modules against overcurrent, overvoltage, and overtemperature conditions.
- Support hardware-level dual boot, use two FLASH chips to store boot software (system boot program), realize hardware-level boot redundancy backup, and avoid the failure of the switch to start due to FLASH chip failure.

Outstanding management capacity

The switch provides a variety of management features and is easy to manage. It offers the following device management features:

- Provides multiple management interfaces, including the console port, out-of-band management Ethernet port, and USB port.
- Supports configuration and management from CLI or Intelbras Intelligent Management Center.
- Supports multiple access methods, including SNMPv1/v2/v3, Telnet, and more secure SSH 2.0 and SSL.

Uses OAM to enhance system management capability.

- Supports FTP for system upgrade.

Precision Time Protocol (PTP)

Intelbras SC 5530 switch series supports the 1588V2 function to meet the high-precision time synchronization requirements between network devices. Compared with GPS time synchronization with the same precision, it improves security and lowers deployment costs.

Intelligent Network Quality Analyzer (iNQA)

Intelbras SC 5530 switch series supports iNQA. iNQA provides the following benefits:

- True measurement results—iNQA measures the service packets directly to calculate packet loss results, thus reflecting the real network quality.
- Wide application range—Applicable to Layer 2 network and Layer 3 IP network. iNQA supports the network-level and direct link measurement flexibly.
- Fast fault location—iNQA obtains the packet loss time, packet loss location, and number of lost packets in real time.
- Applicable to different applications—You can apply iNQA to multiple scenarios, such as point-to-point, point-to-multipoint, and multipoint-to-multipoint.

Enhanced Media Delivery Index (eMDI)

eMDI is a solution to audio and video service quality monitoring and fault locating. It is intended to solve problems caused by packet loss, packet sequence errors, and jitters.

eMDI monitors and analyzes specific TCP or RTP packets on each node of an IP network in real time, providing data for quickly locating network faults.

Multichassis Link Aggregation Group (M-LAG)

Intelbras SC 5530 switch series support M-LAG, which enables links of multiple switches to aggregate into one to implement device-level link backup. M-LAG is applicable to servers dual-homed to a pair of access devices for node redundancy.

- **Streamlined topology:** M-LAG simplifies the network topology and spanning tree configuration by virtualizing two physical devices into one logical device.
- **Independent upgrading:** The DR member devices can be upgraded independently one by one to minimize the impact on traffic forwarding.
- **High availability:** The DR system uses a keepalive link to detect multi-active collision to ensure that only one member device forwards traffic after a DR system splits.

Visualization ability

Intelbras SC 5530 series switches support Telemetry technology, which can send the switch's real-time resource information and alarm information to the O&M platform through the gRPC protocol.

The platform can realize network quality backtracking, troubleshooting, risk early warning, architecture optimization and other functions to accurately guarantee user experience by analyzing real-time data.

Specifications

Technical specifications

Item	SC 5530-24Y-8H	SC 5530-48Y-8H
CPU	Quad core, 2GHz	Quad core, 2GHz
Flash/SDRAM	4GB/4GB	4GB/4GB
Packet Buffer	36M	36M
Box Switching capacity	4.8Tbps	4.8Tbps
Port Switching capacity	2.8Tbps	4Tbps
Packet forwarding rate	1800Mpps	2000Mpps
Dimensions (H × W × D)	44 × 440 × 400 mm (1.73 × 17.32 × 15.75 in)	44 × 440 × 400 mm (1.73 × 17.32 × 15.75 in)
Weight	≤ 7.3 kg	≤ 7.6 kg
Console ports	1	1
Management Ethernet ports	1	1
USB ports	1	1
SFP+	-	-
SFP28	24	48
QSFP28	8	8
Power supply slots (power supplies do not follow the product by default)	2	2
Fan trays (do not follow the product by default)	5 hot swappable fan trays, invertible airflow	5 hot swappable fan trays, invertible airflow
Input voltage range	AC: Rated: 100 VAC to 240 VAC @ 50 Hz/60 Hz	AC: Rated: 100 VAC to 240 VAC @ 50 Hz/60 Hz

Item	SC 5530-24Y-8H	SC 5530-48Y-8H
	Max.: 90 VAC to 264 VAC @ 47 Hz to 63 Hz	Max.: 90 VAC to 264 VAC @ 47 Hz to 63 Hz
	HVDC: Rated voltage range: 240V DC Max voltage range: 180V ~ 320V DC	HVDC: Rated voltage range: 240V DC Max voltage range: 180V ~ 320V DC
	DC: Rated voltage range: -48 to -60 VDC Max voltage range: -36 to -72 VDC	DC: Rated voltage range: -48 to -60 VDC Max voltage range: -36 to -72 VDC
Power consumption	MIN: Single AC: 76W; Dual AC: 83W.	MIN: Single AC: 76W; Dual AC: 83W.
	MAX: Single AC: 188W; Dual AC: 193W.	MAX: Single AC: 223W; Dual AC: 227W.
Operating temperature	-5°C to 45°C (23°F to 113°F)	-5°C to 45°C (23°F to 113°F)
	-60m-5000m altitude: From 0m, the maximum operating temperature reduce by 0.33°C for every time 100 the altitude increases by 100m.	-60m-5000m altitude: From 0m, the maximum operating temperature reduce by 0.33°C for every time 100 the altitude increases by 100m.
Storage temperature	-40°C to 70°C(-40°F to 158°F)	-40°C to 70°C(-40°F to 158°F)
Operating & storage humidity	5% RH to 95% RH, non-condensing	5% RH to 95% RH, non-condensing
MTBF(Year)	61.4	58.44

Software Specifications

Feature	SC 5530 series
Virtualization	Intelligent Resilient Framework 2 (IRF2) Distributed device management Distributed link aggregation Distributed resilient routing Stacking through standard Ethernet ports Local device stacking and remote device stacking LACP-, BFD-, and ARP-based multi-active detection (MAD) M-LAG
Link aggregation	10GE/25G/40GE/100GE port aggregation Static aggregation Dynamic aggregation
Jumbo frame	Supported

Feature	SC 5530 series
MAC address table	Static/Dynamic/ Blackhole MAC address MAC automatic learning and aging MAC learning limit MAC filtering
SND/ Openflow	Openflow1.3 Multiple controllers (EQUAL mode, active/standby mode) Multi-table pipeline Group table Meter
VLAN	Port-based VLAN Default VLAN QinQ and flexible QinQ Guest VLAN Voice VLAN VLAN mapping STP/RSTP/MSTPPVST+ and RPVST+ MVRP VLAN division based on IP, MAC, protocol, policy, port
Traffic monitoring	sFLOW
LLDP	LLDP/LLDP-MED
MPLS	Support MPLS MCE ("VRF-Light" - vpn-instance, 255 routing instances) Support MPLS L3VPN Support MPLS L2VPN
DHCP Ipv4 & ipv6	DHCPv4/v6 client DHCP snooping, DHCPv6 snooping DHCPv4/v6 relay DHCPv4/v6 server DHCP snooping Option 82/DHCP relay Option 82
ARP	Static entry Gratuitous ARP Common proxy ARP and local proxy ARP Dynamic ARP inspection ARP anti-attack ARP source suppression ARP detection based on DHCP snooping safety entries, 802.1X entries, and IP/MAC static binding entries
Routing	IPv4/IPv6 static routing, Dual stack Dynamic routing such as RIPv1/2 and RIPng Static routing IPv4/IPv6 Policy routing Equal-cost multi-path routing (ECMP) VRRP/VRRPv3 (255 groups)

Feature	SC 5530 series
	VRF-Light - vpn-instance, 255 routing instances) OSPFv1/v2, OSPFv3 BGP, BGP4+ for Ipv6 IS-IS, IS-IS v6 Policy-Based Routing (PBR) GRE/IPv4 tunnel GRE/IPv6 tunnel
IPv6	Neighbor Discovery (ND) ND Snooping PMTU ICMP v6, Telnet v6, SFTP v6, SNMP v6, BFD v6, VRRP v3 IPv6 Portal IPv6 tunnel IPV6 SAVI
VxLAN	VXLAN Layer 2 switching VXLAN routing switching VXLAN centralized gateway, distributed Anycast gateway BGP EVPN Centralized VXLAN control through OpenFlow+Netconf
DC feature	802.1Qbb PFC ECN
Multicast	IGMP Snooping v1/v2/v3 MLD Snooping v1/v2 PIM Snooping MLD proxy Multicast VLAN Multicast load sharing of bundled ports Port-based multicast traffic statistics Controllable multicast MLD v1/v2 PIM-DM, PIM-SM and PIM-SSM MSDP and MSDP for IPv6 MBGP and MBGP for IPv6 IGMP Snooping fast-leave IGMP Snooping group-policy
Zero configuration	DHCP auto-config CWMP-TR069
Broadcast/Multicast/Unicast storm suppression	Storm suppression based on port bandwidth percentage Storm suppression based on PPS Storm suppression based on BPS
Loop-free redundant Layer	STP/RSTP/MSTP/PVST/PVST+ Root Guard

Feature	SC 5530 series
2 topology	<p>BPDU Guard</p> <p>BPDU Protection</p> <p>BPDU Filter</p> <p>Loop Guard</p> <p>TC Guard</p> <p>Flap Guard</p> <p>Edged-port (When the link to a port comes up and 802.1W detects that the port is an Edge port, that port instantly goes into a forwarding state)</p> <p>RRPP</p> <p>SmartLink</p> <p>Link Detection (UDLD)</p> <p>Digital Diagnostic Monitor (DDM)</p> <p>G.8032 Ethernet ring protection switching (ERPS), Convergence time within 50ms</p>
QoS/ACL	<p>Rate limit for receiving and transmitting packets</p> <p>CAR</p> <p>Eight output queues per port</p> <p>Flexible queue scheduling algorithms based on both port and queue, including SP, WDRR, WRR, WFQ, and SP+WRR</p> <p>802.1p priority and DSCP priority</p> <p>Layer 2 to Layer 4 packet filtering</p> <p>Traffic classification based on source MAC, destination MAC, source IP, destination IP, port, protocol, and VLAN</p> <p>Time range</p> <p>WRED</p>
Mirroring	<p>Flow mirroring</p> <p>N:4 port mirroring</p> <p>Local port mirroring (SPAN)</p> <p>Layer 2 remote port mirroring (RSPAN)</p> <p>Layer 3 remote port mirroring (ERSPAN)</p> <p>Policy-based Mirroring</p> <p>Traffic Mirroring</p>
Security	<p>Hierarchical user management and password protection</p> <p>MAC-based authentication</p> <p>802.1X</p> <p>Storm constrain</p> <p>AAA authentication</p> <p>Portal authentication</p> <p>RADIUS authentication (COA Support)</p> <p>HWTACACS</p> <p>SSH, SSH2.0</p> <p>Secure Copy</p> <p>Port isolation, Port security, Sticky MAC</p> <p>IP/MAC/Port/VLAN binding</p> <p>MFF</p> <p>EAD</p> <p>SAVI, SAVA</p>

Feature	SC 5530 series
	<p>IP source guard</p> <p>Public Key Infrastructure (PKI)</p> <p>CPU protection</p> <p>Anti DOS/APR/ICMP attack</p> <p>Control Plane Protection (CoPP), Wireless Intrusion Prevention System (WIPS)</p> <p>All ports MACsec</p>
Loading and upgrading	<p>Loading and upgrading through XMODEM/FTP/TFTP</p> <p>Loading and upgrading from USB</p>
Management and maintenance	<p>Zero Touch Provisioning</p> <p>Configuration through CLI, Telnet, and console port</p> <p>Embedded AC, maximum support management 2K AP</p> <p>Restful</p> <p>Python</p> <p>NETCONF</p> <p>Telemetry</p> <p>Job scheduler</p> <p>ISSU</p> <p>VCT</p> <p>5 RMON groups:</p> <p>RMON Statistics Group (Number of collisions, CRC alignment errors, Number of packets below or above minimum size, Number of broadcasts, Number of multicasts, Number of bytes received, Number of packets received);</p> <p>History Group (Bandwidth Utilization, Number of Error Packets, Total Number of Packets);</p> <p>Event Group (Log, Trap, Log-Trap); The event group controls the generation and notifications of events triggered by the alarms defined in the alarm group and the private alarm group. The following are the methods of handling RMON alarm events:</p> <p>Alarm Group (The RMON alarm group monitors alarm variables, such as the count of received packets (etherStatsPkts) on an interface.);</p> <p>Private Alarm Group (The private alarm group allows you to perform basic mathematical operations on various variables and compare the calculation result with the rise and fall thresholds.)</p> <p>802.1ag and 802.3ah</p> <p>Simple Network Management Protocol (SNMPv1/v2c/v3)</p> <p>INC – Intelbras Network Center</p> <p>INC Cloud – Intelbras Network Center Cloud</p> <p>System log</p> <p>Syslog server (up to 20 servers)</p> <p>Alarming based on severity</p> <p>NTP (cliente and server), PTP</p> <p>Power, fan, and temperature alarming</p> <p>Debugging information output</p> <p>Ping and Tracert</p> <p>Track</p> <p>Telnet-based remote maintenance</p> <p>USB for file upload and download, support USB deployment</p> <p>iNQA (Intelligent Network Quality Analyzer)</p> <p>eMDI (Enhanced Media Delivery Index)</p>

Performance Specification

Model	SC 5530 series
MAC address entries(max)	576K
VLAN table	4094
Active vlan	4094
VLAN interface	4094
IPv4 routing entries(max)	768K
IPv4 ARP entries(max)	78K
IPv4 ACL entries	Ingress: 26624 Egress: 4096
IPv4 multicast L2 entries	8K
IPv4 multicast L3 entries	8K
IPv6 unicast routing entries(max)	64K
QOS forward queues	8
IPv6 ACL entries	Ingress: 26624 Egress: 4096
IPv6 ND entries(max)	48K
IPv6 multicast L2 entries	8K
IPv6 multicast L3 entries	8K
Jumbo frame length	13312
Max Stacking Member	9
Max Stacking Bandwidth	800Gbps

Standards and Protocols Compliance

Organization	Standards and Protocols
IEEE	802.1x Port based network access control protocol
	802.1ab Link Layer Discovery Protocol

Organization	Standards and Protocols
	802.1ad - Provider Bridges
	802.1ak MVRP and MRP
	802.1ax Link Aggregation
	802.1d Media Access Control Bridges
	802.1p Priority
	802.1q VLANs
	802.1s Multiple Spanning Trees
	802.1ag Connectivity Fault Management
	802.1v VLAN classification by Protocol and Port
	802.1w Rapid Reconfiguration of Spanning Tree
	802.3ad Link Aggregation Control Protocol
	802.3ah Ethernet in the First Mile
	802.3x Full Duplex and flow control
	802.3af Power over Ethernet
	802.3at Power over Ethernet
	802.3bt Power over Ethernet
	802.3az Energy Efficient Ethernet
	802.3u 100BASE-T
	802.3ab 1000BASE-T
	802.3z 1000BASE-X
	802.3ae 10-Gigabit Ethernet
802.3by 25 Gbps	
802.3ba 40/100G Ethernet	
IETF	RFC 1112 Host Extensions for IP Multicasting
	RFC 1213 MIB-2 Stands for Management Information Base

Organization	Standards and Protocols
	RFC 1305: Network Time Protocol (Version 3)
	RFC 2131 Dynamic Host Configuration Protocol
	RFC 2236 IGMPv2
	RFC 2374 An IPv6 Aggregatable Global Unicast Address Format
	RFC 2474 Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers
	RFC 2570 Introduction to Version 3 of the Internet-standard Network Management Framework
	RFC 2597 Assured Forwarding PHB Group
	RFC 2711 IPv6 Router Alert Option
	RFC 2787 Definitions of Managed Objects for the Virtual Router Redundancy Protocol
	RFC 2819: Remote Network Monitoring Management Information Base
	RFC 2893 Transition Mechanisms for IPv6 Hosts and Routers
	RFC 2918 Route Refresh Capability for BGP-4
	RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations
	RFC 2934 Protocol Independent Multicast MIB for IPv4
	RFC 3019 MLDv1 MIB
	RFC 3046 DHCP Relay Agent Information Option
	RFC 3056 Connection of IPv6 Domains via IPv4 Clouds
	RFC 3065 Autonomous System Confederation for BGP
	RFC 3101 OSPF Not-so-stubby-area option
	RFC 3137 OSPF Stub Router Advertisement sFlow
	RFC 3176 InMon Corporation's sFlow: A Method for Monitoring Traffic in Switched and Routed Networks
	RFC 3376 IGMPv3
	RFC 3416 (SNMP Protocol Operations v2)
	RFC 3417 (SNMP Transport Mappings)
	RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)

Organization	Standards and Protocols
	RFC 3484 Default Address Selection for IPv6
	RFC 3509 Alternative Implementations of OSPF Area Border Routers
	RFC 3580 IEEE 802.1X Remote Authentication Dial In User Service (RADIUS) Usage Guidelines
	RFC 3587 IPv6 Global Unicast Address Format
	RFC 3623 Graceful OSPF Restart
	RFC 3768 Virtual Router Redundancy Protocol (VRRP)
	RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
	RFC 3973 PIM Dense Mode
	RFC 4022 MIB for TCP
	RFC 4113 MIB for UDP
	RFC 4213 Basic Transition Mechanisms for IPv6 Hosts and Routers
	RFC 4251 The Secure Shell (SSH) Protocol
	RFC 4252 SSHv6 Authentication
	RFC 4253 SSHv6 Transport Layer
	RFC 4254 SSHv6 Connection
	RFC 4271 A Border Gateway Protocol 4 (BGP-4)
	RFC 4273 Definitions of Managed Objects for BGP-4
	RFC 4291 IP Version 6 Addressing Architecture
	RFC 4292 IP Forwarding Table MIB
	RFC 4293 Management Information Base for the Internet Protocol (IP)
	RFC 4360 BGP Extended Communities Attribute
	RFC 4419 Key Exchange for SSH
	RFC 4443 ICMPv6
	RFC 4456 BGP Route Reflection: An Alternative to Full Mesh Internal BGP (IBGP)
	RFC 4486 Subcodes for BGP Cease Notification Message

Organization	Standards and Protocols
	RFC 4502: Remote Network Monitoring Management Information Base Version 2
	RFC 4541 IGMP & MLD Snooping Switch
	RFC 4552 Authentication/Confidentiality for OSPFv3
	RFC 4601 PIM Sparse Mode
	RFC 4607 Source-Specific Multicast for IP
	RFC 4724 Graceful Restart Mechanism for BGP
	RFC 4750 OSPFv2 MIB partial support no SetMIB
	RFC 4760 Multiprotocol Extensions for BGP-4
	RFC 4861 IPv6 Neighbor Discovery
	RFC 4862 IPv6 Stateless Address Auto-configuration
	RFC 4940 IANA Considerations for OSPF
	RFC 5059 Bootstrap Router (BSR) Mechanism for PIM, PIM WG
	RFC 5065 Autonomous System Confederation for BGP
	RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
	RFC 5187 OSPFv3 Graceful Restart
	RFC 5340 OSPFv3 for IPv6
	RFC 5424 Syslog Protocol
	RFC 5492 Capabilities Advertisement with BGP-4
	RFC 5519 Multicast Group Membership Discovery MIB (MLDv2 only)
	RFC 5798 VRRP (exclude Accept Mode and sub-sec timer)
	RFC 5880 Bidirectional Forwarding Detection
	RFC 5905 Network Time Protocol Version 4: Protocol and Algorithms Specification (NTPv4)
	RFC 6620 FCFS SAVI
	RFC 6987 OSPF Stub Router Advertisement
	RFC6020 YANG - A Data Modeling Language for the Network Configuration Protocol (NETCONF)

Organization	Standards and Protocols
	RFC7348 Virtual eXtensible Local Area Network (VXLAN): A Framework for Overlaying Virtualized Layer 2 Networks over Layer 3 Networks
	RFC7432 BGP MPLS-Based Ethernet VPN
	RFC4664 Framework for Layer 2 Virtual Private Networks (L2VPNs)
	RFC4665 Service Requirements for Layer 2 Provider Provisioned Virtual Private Networks
	RFC4761 Virtual Private LAN Service (VPLS) Using BGP for Auto-Discovery and Signaling
	RFC4762 Virtual Private LAN Service (VPLS) Using Label Distribution Protocol (LDP) Signaling
	RFC 5176, Dynamic Authorization Extensions to Remote Authentication Dial In User Service (RADIUS)
	RFC5120 M-ISIS: Multi Topology (MT) Routing in Intermediate System to Intermediate Systems (IS-ISs)
	RFC5280 Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile
	RFC5308 Routing IPv6 with IS-IS
	RFC5381 Experience of Implementing NETCONF over SOAP

Product Information

Modelo do produto	Descrição do produto
SC 5530-24Y-8H	SWITCH GERENCIAVEL SC 5530-24Y-8H S/FAN S/FONTE
SC 5530-48Y-8H	SWITCH GERENCIAVEL SC 5530-48Y-8H S/FAN S/FONTE
PSR250-12A1	FONTE MODULAR AC PSR250-12A1
LSPM1FANSB-SN	VENTILADOR MODULAR LSPM1FANSB-SN