

The Signamax C-500 series of fully managed switches are designed for demanding network environments with dual hot swappable power supplies and 10G SFP+ Uplinks. All switches have the capacity for concurrent 30W per port PoE+ delivery. The C-500 switches have full Layer 2 capabilities with enhanced access security, ACLs, traffic prioritization, and IPv6 support.

The C-500 Series switches are built from the ground up for easy deployment and management without compromising any of the power and flexibility traditionally found in enterprise-class switches.



- Dual hot-swappable power supplies for total PoE budget of 1640W
- Non-blocking switches with up to 176Gbps bandwidth
- Static IP Routing & DHCP Server
- 8 dedicated QoS queues for converged voice, video, and data applications
- IEEE 1588v2 Precision Time Protocol (PTP)
- Built in Device Management System (DMS)
- 4 SFP+ 10G uplink ports
- Advanced Layer 2 functionality such as ITU-T G.8031 and ITU-T G.8032 Ethernet Linear and Ring Protection Switching
- 5 year hardware warranty & support at no additional cost

# Features for deployment in any solution.

## INTELLIGENT POE:

The SC50010 delivers a default 820W PoE budget but can be extended up to 1640W using a secondary AP50030 power supply. The innovative PoE auto-check feature detects if the powered device stops communicating and automatically reboots the device to minimize downtime and operational costs. The C-500 series supports dynamic power allocation and PoE ports can be individually configured for prioritization, scheduling, and consumption.



Port	Ping IP Address	Startup Time	Internet (Mbps)	Retry Time	Failure Log	Failure Action	Reboot Time(s)	Max. Reboot Times
1	192.168.1.78	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
2	192.168.1.78	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
3	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
4	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
5	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
6	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
7	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
8	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
9	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
10	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
11	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
12	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
13	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5
14	192.168.0.08	00	0.00	0.00	AP50030, REBOOT	Reboot	00	5

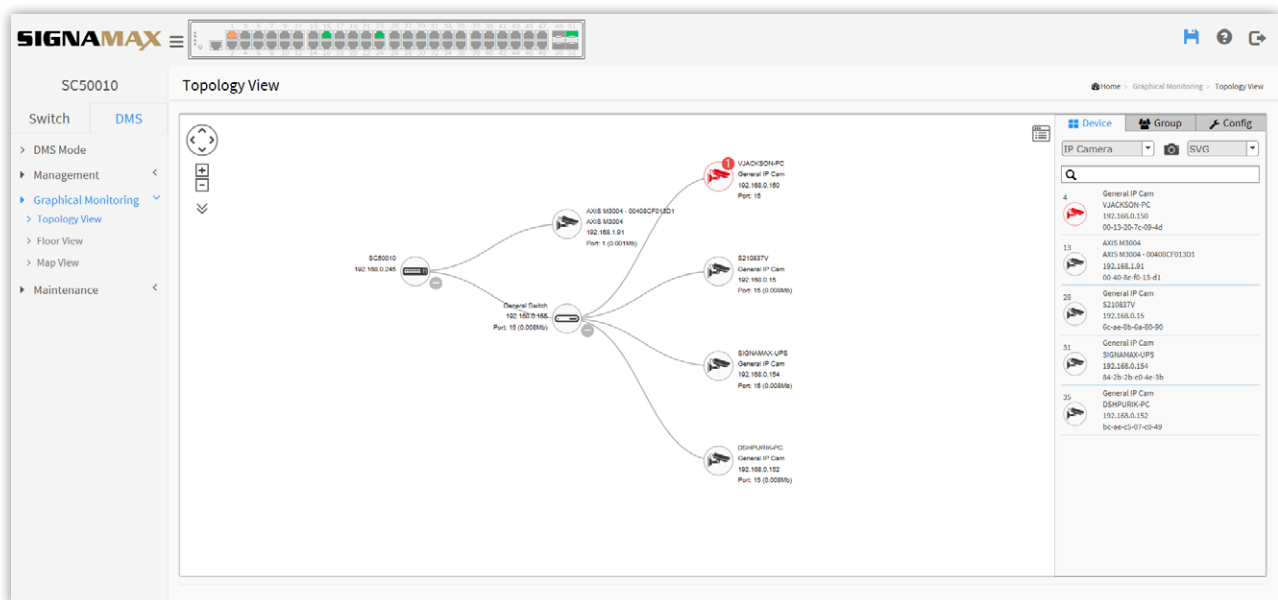
## ENTERPRISE GRADE:

The C-500 Series runs a sophisticated operating system that provides a variety of advanced features including:

- Static Routing and DHCP Server
- Dynamic VLAN assignment and Auto Voice VLAN
- Link Aggregation (LACP)
- Ethernet Ring Protection Switching (ERPS)
- IGMP and MLD snooping

## DEVICE MANAGEMENT SYSTEM (DMS):

The C-500 Series Device Management System automatically detects and classifies connected network devices. Devices can be placed on an upload floorplan or using Google Maps. The DMS monitors all traffic and packets to the devices and provides day/week analysis and can generate an alarm if an abnormal condition exists. Administrators can view device information including the type, name, address and PoE usage and can reboot or remotely login to the device directly from the DMS system.



# C-500 Specifications

## PORTS

48 10/100/1000 RJ-45 PoE+ Ports  
4 SFP+ 100Mb/1G/10G Ports

## PERFORMANCE

32K MAC Addresses  
**Switching Capacity:** 176Gbps  
**Forwarding Rate:** 130.944 Mpps  
512 MB DRAM  
32 Mb Packet Buffer  
64 MB Flash memory  
Supports 14K Jumbo Frames  
Wirespeed forwarding  
IPv4/IPv6 Dual Protocol Stack

## SECURITY

DDOS Protection  
Port Isolation  
Broadcast/Multicast/Unknown Storm Control  
Up to 512 Access Control Lists (ACL) based on L2/L3/L4  
Port Security  
AAA (IEEE 802.1X RADIUS/TACACS+)  
IP Source Guard  
DHCP Snooping  
Encrypt switch access with SSH and SSL

## LAYER 3

Up to 130 Static routes  
DHCP v4/v6 Client / DHCP Relay / DHCP Server

## LAYER 2

SFP+ ports support IEEE 802.3u (100FX),  
802.3z (1000SX/LX/LHX/ZX), 802.3aq (10GBase-SR/LR/LRM)  
IEEE 802.3x Flow Control

### Spanning Tree:

IEEE 802.1D Spanning Tree Protocol (STP),  
IEEE 802.1w Rapid Spanning Tree Protocol (RSTP),  
IEEE 802.1s Multiple Rapid Spanning Tree Protocol  
Loopback Detection  
BPDU Filter/Guard  
Root Guard

### Up to 4094 IEEE 802.1Q (802.3ac) VLANs:

Port-Based/MAC-Based/Protocol-Based(IEEE 802.1v)  
Guest VLAN  
Auto Voice VLAN  
Dynamic VLAN Assignment  
GARP VLAN Registration Protocol (GVRP)  
802.3ad Link Aggregation (static and LACP)

### Ring Management:

ITU-T G.8031 Ethernet Linear Protection Switching  
ITU-T G.8032 Ethernet Ring Protection Switching (ERPS)

### Multicast:

IGMP v1/v2/v3 snooping  
IGMP Querier  
IGMP Immediate leave  
MLD v1/v2 Snooping  
Multicast VLAN Registration (MVR)  
IEEE 802.1AB LLDP/LLDP-MED  
IEEE 802.3az Energy Efficient Ethernet  
Q-in-Q

## MANAGEMENT

Web-based Graphical User Interface (GUI)  
Industry-standard CLI (Telnet/SSH) with context-sensitive help  
Console management port on the front panel for ease of access  
Comprehensive SNMP MIB support for standards based device management  
Dual Image/Configuration  
RMON (groups 1,2,3 and 9)  
NTP/SNTP  
IEEE 1588v2 Precision Time Protocol (PTP)  
SNMP v1/v2/v3

## QoS

Rate Limiting (Ingress/Egress Port-Based)  
Priority Queues Schedule (WRR)  
Port-Based QoS  
IPv4/IPv6 DSCP  
DiffServ  
Auto VOIP  
8 HW Queues per port for 802.1p priority tagging  
Policy based dynamic QoS

## PoE

Support IEEE 802.3af/IEEE802.3at on each port  
Dynamic Power Allocation  
PoE Scheduling  
Auto-checking

### PoE Budget:

**1 Power Supply:** 820W  
**2 Power Supplies:** 1640W

## DIAGNOSTIC TOOLS

Cable Test  
Digital Diagnostic Monitoring (DDM) on SFP Ports  
Ping polling for IPv4 and IPv6  
Port Mirror (One to One, One to Many)  
Remote Mirror  
Event/Error Log/Syslog/SMTP Alerts  
SFlow

## PHYSICAL CHARACTERISTICS

**Dimensions:** 17.4 x 17.1 x 1.73 in (44.2 x 44 x 4.4 cm)  
**Weight:** 12.45 lb (5.6 kg)

### Heat Dissipation:

**1 Power Supply:** 3373.85 Btu/H  
**2 Power Supplies:** 5551.92 Btu/H

### Acoustic Noise:

XXX  
**MTBF:** 69K hrs

## ELECTRICAL CHARACTERISTICS

**Power Supply AC Input:** 100 - 240 V AC, 50/60 Hz  
**Max Power Consumption:** 1840W

## ENVIRONMENTAL REQUIREMENTS

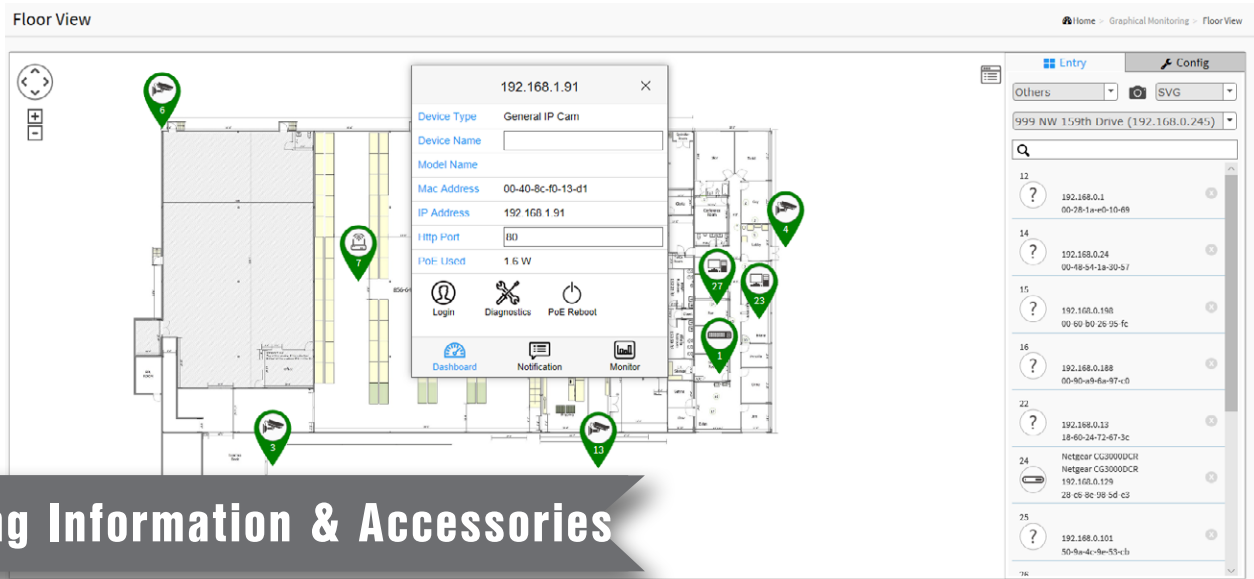
**Operating Temperature:** 0 to 113°F (32 to 45°C)  
**Storage Temperature:** -40 to 158°F (-40 to 70°C)  
**Operating/Storage Humidity:** 10 to 95% (non-condensing)

## CERTIFICATIONS

**Emissions:** CE Mark: EN 55022, Class A; FCC Part 15 Class A  
**Immunity:** IEC 61000-3-3, 61000-4-2/3/4/5/6/11

## WARRANTY

Five Years (Including power supply)



## Ordering Information & Accessories

### ETHERNET SWITCHES

PART NO.	DESCRIPTION
SC50010	48 Port Gigabit PoE Managed Switch with 4 SFP+ Ports

### ACCESSORIES

#### Power Supplies

AP50030	920W Extended Power Supply
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#### Replacement Cables

AC30030	C-500 Series Console Cable
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#### Replacement Mounting Kits

AM30140	C-500 48 Port Switches Rack Mount Kit
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### SFP MODULES

PART NO.	DESCRIPTION
065-80SR10G300M	10GBaseSR SFP+ Module 850nm up to 300m
065-80LR10G10KM	10GBaseLR SFP+ Module 1310nm up to 10km
065-80PDAC1M	10G SFP+ Direct Attach Cable, 1m
065-79SXMG	1000SX Multi-Mode SFP Module 850nm up to 550m
065-79LXMG	1000LX Single-Mode SFP module 1310nm up to 10km
065-79ZXMG	1000ZX Single-Mode SFP Module 1550nm up to 80km
065-73FXMM5MG	100FX / OC-3 / STM-1 Multi-Mode SFP Module 1300nm up to 5km
065-73FXSM20MG	100FX / OC-3 / STM-1 Single-Mode SFP Module 1300nm up to 20km
065-791000TTXMG	10/100/1000TX SFP Module 100m span

For a complete list of SFP Modules visit [www.signamax.com](http://www.signamax.com).



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