SmartAir Controller Series

SOHO & Enterprise class Smart WLAN Controller

Key features & Benefits

Selectable systems according to network scale and power redundancy feature
SmartAir controller solution have various systems according to the number of AP to be served . Each models support up to 128, 256, 512, 4096 APs. 3 models have power redundancy feature.

Detecting and Blocking DDoS attacks
SmartAir Controller provides the function which is to detect and block the DDoS attacks like TCP SYN flooding, ICMP flooding, UDP flooding, ARP flooding and IP spoofing, IP sweeping , etc.

Simple to use and manage
Web-based configuration wizard configures an entire WLAN in minutes. Centralized management and automatic optimization of entire WLAN.

Advanced WLAN features and functions
Advanced wireless networking features include rogue AP & other threat detection, interference detection, band steering, airtime fairness, role-based user policies, per-user/per-SSID/per-group rate-limiting, hotspot and guest networking services.

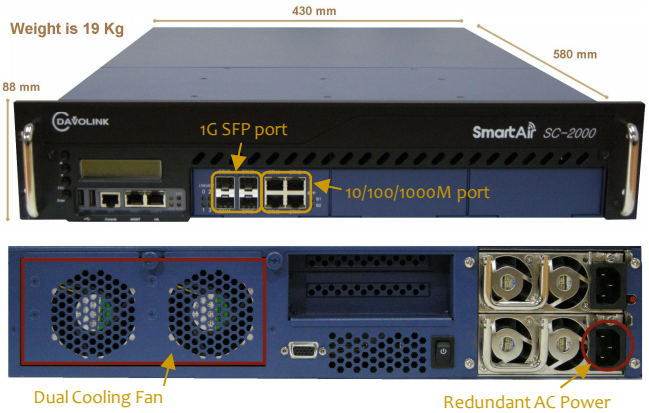
Distributed forwarding architecture
Maximizes data throughput by sending all data traffic directly from the access points to the wired network. Of course, the management traffic will be sent to controller.

Simple to deploy
SmartAir Controller integrates seamlessly with existing switches, firewalls, authentication server and other network infrastructure. Access points can be configured and applied automatically by using Smart Group function that classify according to AP names within DISCOVER message and apply the configuration.

System Redundancy
Redundancy feature of SmartAir controller ensures high network availability and is easy to use with automatic synchronization of configuration and authorized users between controllers.

Simple to manage
SmartAir Controller automatically manages the SmartAir network of APs - automatically adjusting transmit power levels and RF channel assignments as needed, to avoid interference, prevent adjacent APs from interfering and enable redundant coverage in the event of an AP failure. Configuration changes can easily be applied to multiple APs, or the entire system, simultaneously.

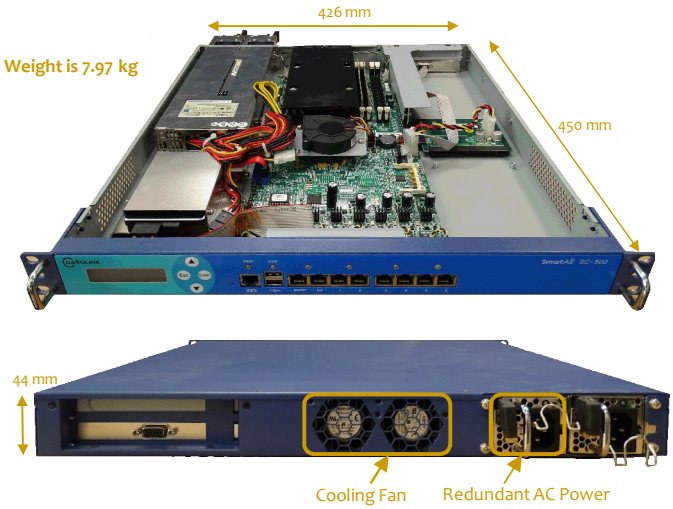
Specifications of SC-2000



Physical Characteristics	
Power	Å460W, 1+1 ATX redundant power supplies
Physical Size	Å430 mm(W) x 580 mm(D) x 88 mm(H)
Weight	Å19.00 kg
Processor	ÅDual Intel Xeon E5620 2.4GHz
Memory	ÅFour DDR3 4GByte (total 16GByte)
Storage	ÅOne 240GB SSD ÅOne 1TB SATA3 HDD
Ethernet ports	ÅFour 1Gbps SFP ports(optional) ÅFour 10/100/1000Mbps RJ-45 ports
Console	ÅOne RJ-45 Type port
USB port	ÅTwo USB 2.0 Host ports
Environmental Conditions	ÅOperating Temperature : 5°C ~ 40°C

Capacity	
Managed APs	ÅUp to 4,096
WLANs(SSIDs)	Å2,048
Concurrent stations	ÅUp to 163,840

Specifications of SC-500

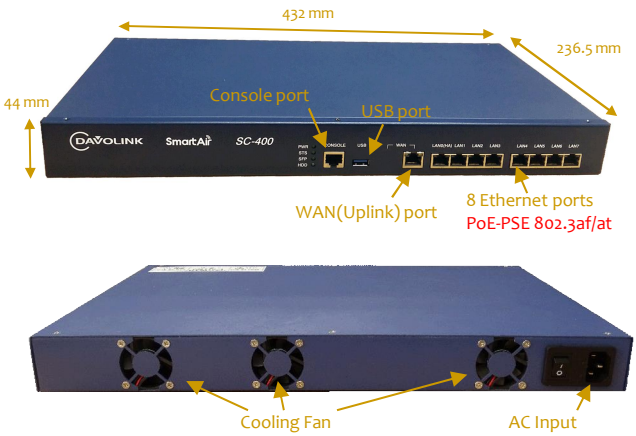


Physical Characteristics	
Power	200W, 1+1 ATX redundant power supplies
Physical Size	426 mm(W) x 450 mm(D) x 44 mm(H)
Weight	7.97 kg
Processor	Intel i5 3470 (3.2GHz)
Memory	Two DDR3 4GByte (total 8GByte)
Storage	One 240GB SSD
Ethernet ports	Eight 10/100/1000Mbps RJ-45 ports
Console	One RJ-45 Type port
USB port	Four USB 2.0 Host ports
Environmental Conditions	Operating Temperature： 5°C ~ 40°C

Capacity	
Managed APs	Up to 512
WLANs(SSIDs)	2,048
Concurrent stations	Up to 20,480

Specifications of SC-400

Weight is 3.35 kg

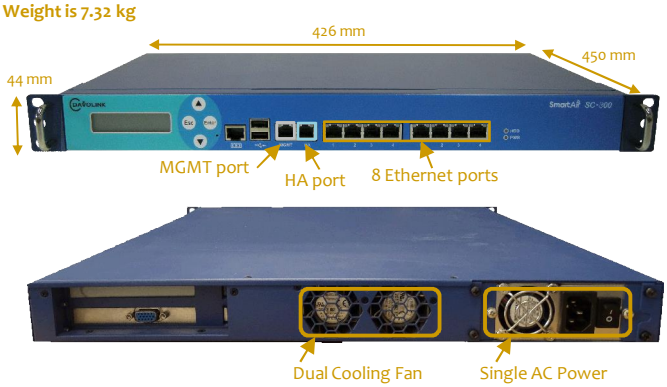


Physical Characteristics	
Power	300W, Single power supply
Physical Size	432 mm(W) x 236.5 mm(D) x 44 mm(H)
Weight	3.35 kg
Processor	Freescale, LS1024A, 1.2GHz
Memory	One DDR3 2GByte
Storage	One 128GB SSD
Ethernet ports	One 10/100/1000Mbps RJ-45 port(Uplink) Eight 10/100/1000Mbps RJ-45 ports (Eight PoE-PSE 802.3af/at ports)
Console	One RJ-45 Type port
USB port	One USB 2.0 Host port
Environmental Conditions	Operating Temperature： 5°C ~ 40°C

Capacity	
Managed APs	Up to 256
WLANs(SSIDs)	2,048
Concurrent stations	Up to 10,240

Specifications of SC-300

Weight is 7.32 kg

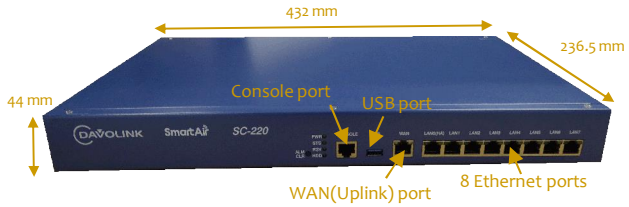


Physical Characteristics	
Power	200W Single power supply
Physical Size	426 mm(W) x 450 mm(D) x 44 mm(H)
Weight	7.32 kg
Processor	Intel i5 3470 (3.2GHz)
Memory	Two DDR3 4GByte (total 8GByte)
Storage	One 240GB SSD
Ethernet ports	Eight 10/100/1000Mbps RJ-45 ports One MGNT & One HA port
Console	One RJ-45 Type port
USB port	Four USB 2.0 Host ports
Environmental Conditions	Operating Temperature： 5°C ~ 40°C

Capacity	
Managed APs	Up to 512
WLANs(SSIDs)	2,048
Concurrent stations	Up to 20,480

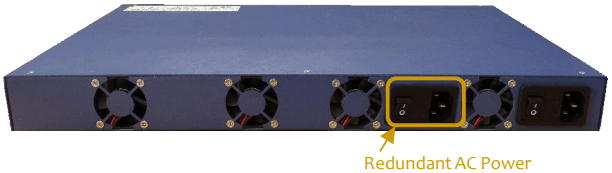
Specifications of SC-210/220

Weight is 3.35 kg



SC-210 Rear View

SC-220 Rear View



Physical Characteristics

Power	ÅSC-210 : 70W, Single power supply ÅSC-220 : 70W, 1+1 ATX Redundant power supplies
Physical Size	Å432 mm(W) x 236.5 mm(D) x 44 mm(H)
Weight	Å3.35 kg
Processor	ÅFreescale, LS1024A, 1.2GHz
Memory	ÅOne DDR3 2GByte
Storage	ÅOne 128GB SSD
Ethernet ports	ÅOne 10/100/1000Mbps RJ-45 port(Uplink) ÅEight 10/100/1000Mbps RJ-45 ports
Console	ÅOne RJ-45 Type port
USB port	ÅOne USB 2.0 Host port
Environmental Conditions	ÅOperating Temperature : 5°C ~ 40°C

Capacity

Managed APs	ÅUp to 256
WLANs(SSIDs)	Å2,048
Concurrent stations	ÅUp to 10,240

Features

Radio Resource Management

ÅDynamic Channel Control/Selection
ÅAutomatic transmit power and channel control
ÅSelf-healing with coverage hole detection
ÅBand steering with multiple steering modes
ÅLoad balancing of clients
ÅAirtime fairness
ÅAdaptive Noise Immunity
ÅAnalyzing RF Spectrum
ÅSmart Mesh with indoor/outdoor APs
ÅPerformance protection in congested RF environments
ÅMitigates co-channel interference with coordinated access
ÅMitigates adjacent channel interference with optimized receiver sensitivity
ÅEfficient reuse of channels at shorter intervals
ÅMitigates non 802.11 interference without dedicated radios

Service and Networking

ÅL2 fast roaming
- Opportunistic Key Caching
- PMK Key Caching

ÅL3 Roaming
- GRE tunnel between APs

ÅBridging or NAT for LAN/Wireless
ÅDHCP Server/Client
ÅVLAN assignment per SSID
- Optionally, by filer-id of external RADIUS server

ÅQ-in-Q tagging

Note : SC-210/220 will be available in 3Q, 2015.
Note : SC-210/220/400 will have some limitations. So several features like network device management, smart mail, smart report won't be supported.

Security, Authentication and Encryption

ÅStateful inspection firewall(DoS attack prevention)
- TCP/UDP flooding
- SYN flooding
- ARP flooding
- IP Spoofing
- IP Sweeping
- Port Scanning
- Session Limit by source or destination

ÅAP access control from remote device
ÅACL policy with IP address, port of source and destination

ÅWPA-PSK / WPA2-PSK
ÅIEEE 802.11i / WPA2 with passphrase (WPA2-Personal)
ÅIEEE 802.1X (WPA2-Enterprise) and hardware-accelerated AES
ÅEAP Types
- EAP-TLS
- EAP-TTLS/MSCHAPv2
- PEAPv0/EAP-MSCHAPv2
- PEAPv1/EAP-GTC
- EAP-SIM
- EAP-AKA/EAP-AKA Prime
- EAP-FAST

ÅTKIP/AES
ÅHigh availability for authentication
- When disconnecting with controller, AP try to authenticate RADIUS server directly for wireless stations

ÅWIDS (Wireless Intrusion Detection System) feature
- Rogue AP detection
- Misconfigured AP detection
- Client Misassociation detection
- Unauthorized Association detection
- Adhoc detection
- Honey pot detection
- AP MAC Spoofing detection

Note : WIDS feature will be available in 3Q, 2015.

QoS

ÅWireless Multimedia Extensions(WME, subnet of IEEE 802.11e)
ÅU-APSD/WMM Power Save
ÅPrioritizes voice over data for both tagged and untagged traffic
ÅRule and role based QoS processing
ÅQoS policy and Rate Limitation per group, station
- DSCP
- 802.1P
- 802.1P/WMM

DAVOLINK
Wireless Solution Provider