SMC2891W-AN
802.11a/b/g/n Outdoor Dual-Band Wireless Access Point

Product Overview
The EliteConnect SMC2891W-AN is an IEEE 802.11a/b/g/n dual-band, dual-radio outdoor wireless enterprise access point (AP) with a 2x2 MIMO antenna design. The AP can connect to the backbone network through its Gigabit Ethernet interface, which also functions as an 802.3af PoE port and enables the device to be powered by a PoE switch remotely.

The SMC2891W-AN is an ideal outdoor wireless LAN solution for extending network coverage to where wired networks are not available. It can provide a point-to-point or point-to-multipoint wireless bridge function. The SMC2891W-AN includes a built-in high-performance 5 GHz internal antenna and three N-Type external antenna connectors, two for 2.4 GHz and one for 5GHz.

Key Features and Benefits

Wireless 802.11n Technology
Using 802.11n MIMO (Multiple Input Multiple Output) wireless technology, the AP supports two transmitting and two receiving antennas that extend range and increase the throughput by up to nine times that of existing Wi-Fi.

Full Management Capabilities
The SMC2891W-AN supports Simple Network Management Protocol (SNMP v1/v2c/v3), including MIB II and MIB I. The IEEE 802.1X authentication protocol supports Extensible Authentication Protocol (EAP) MD5, Transport Layer Security (TLS), Protected EAP (PEAP), Tunneled TLS (TTLS), EAP-SIM, and EAP-AKA.

Advanced Traffic Management
Support for up to sixteen Virtual Access Point (VAP) interfaces per radio, which allows traffic to be separated for different user groups within the same service area. Each radio can support up to 127 wireless clients, shared between all VAPs, whereby the clients associate with each VAP in the same way as they would with physically separate APs. This means that each VAP can be configured with its own Service Set Identification (SSID), security settings, VLAN assignments, and other parameters, allowing the AP to serve a diverse range of client needs from a single unit.

Dual-Band Access Point
Easy on your budget and simple to install, the AP uses dynamic rate shifting to automatically match the best connection speed, keeping users connected to the network even while roaming.

Application Diagram
Features

Physical Features
One 10/100/1000BASE-T Gigabit Ethernet (RJ-45) port with 802.3af-compliant Power over Ethernet (PoE) support
One console port with an RJ-45 connector
Four LEDs: Power/System, Ethernet, WLAN 1, and WLAN 2
Two N-type antenna connectors for 2.4 GHz 802.11b/g/n radio
One N-type antenna connector for 5 GHz 802.11a/n radio
Embedded 5 GHz dual-polarization directional antenna

Standards
IEEE 802.11n 2.4 GHz and 5.0 GHz
IEEE 802.11a 5.0 GHz
IEEE 802.11b/g, 2.4 GHz
IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
IEEE 802.3af Power over Ethernet (PoE)
IEEE 802.11h Regulatory Domain Selection
Wi-Fi Multimedia (WMM)
Wireless Distribution System (WDS)

Wireless Frequency
802.11g/n:
2.4 ~ 2.4835 GHz (US, Canada)
2.4 ~ 2.4835 GHz (ETSI, Japan)
802.11b:
2.4 ~ 2.4835 GHz (US, Canada)
2.4 ~ 2.4835 GHz (ETSI)
802.11a/n:
5.15 ~ 5.25 GHz (lower band) US/Canada, Europe, Japan
5.25 ~ 5.35 GHz (middle band) US/Canada, Europe, Japan
5.725 ~ 5.825 GHz (upper band) US/Canada
5.50 ~ 5.70 GHz Europe

Wireless Features
VAP (Virtual Access Point) support with up to 16 SSIDs
Operation modes: AP Mode, Point-to-Point WDS, Point-to-Multipoint WDS, WDS With AP
Transmit power adjustment
IEEE 802.11h DFS/DFS2 and automatic TPC
Traffic Control for each SSID
Band preference for same SSID services on dual band
Dynamic Channel Selection for noisy environment
Rate selection to disable low data rate access
Client connection preemption (n>ag>b) in case service capability is full
Auto-channel selection

Security
WEP 64/128-bits
Wi-Fi Protected Access (WPA/WPA2)
WPA/WPA2 (PSK) over WDS
SSH (Secure Shell), Telnet
Secure Sockets Layer (SSL) remote management login
HTTPS
Access control list
RADIUS authentication
EAP-MD5, EAP-TLS, EAP-TTLS, PEAP, EAP-SIM, and EAP-AKA
SSID broadcast disable

Network Management
Industrial CLI (Command Line Interface)
Telent, SSH
Web-based Management (HTTP and HTTPS)
SNMP management v1/v2c/v3
Software download and upgrade by TFTP, FTP, or HTTP
Configuration file backup and restore by TFTP or FTP
System Information – AP status, station status, event logs
Dual image
SNTP
Country selection
Scheduled rebooting
Radius Accounting
IPv4 and IPv6 dual stack support
Link Integrity disables the Wi-Fi service when uplink is not available

Antenna
Antenna Type:
5 GHz: embedded dual-polarization directional patch antenna
2.4 GHz: per attached external antenna type
Antenna Gain:
5 GHz: Up to 10dBi (peak gain)
2.4 GHz: per attached external antenna type

Regulatory Compliance
FCC Part 15
CB, UL, CNS

Radio Signal Certification
FCC Part 15C 15.247, 15.207 (2.4GHz)
NCC (Taiwan)

Mechanical
Dimensions: 19.5 x 19.0 x 7.4 cm (7.68 x 7.48 x 2.91 in.)
Weight: 3.74 lbs (1.7 kg)

Contact

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Check www.smc-asia.com or www.smc.com for your local country contact information
Features

Power
12.95 W for 802.3af
Power Consumption: 10.56 W maximum

Environmental Specification
Temperature:
Standard Operating: -10°C to 60°C (14°F to 140°F)
Storage: -20°C to 70°C (-4°F to 158°F)
Humidity: 5% to 95% (non-condensing)

Ordering information
SMC2891W-AN 802.11a/b/g/n outdoor dual-band wireless access point with embedded 5 GHz antenna

Optional Accessories
- 120G000000051A: 2.4G N-Plug Antenna 2 dBi 19 x 124 mm
- 120G000000052A: 5G N-Plug Antenna 12 dBi 220 x 220 mm
- 120700000135A: RF cable for 5G panel antenna

Warranty
Please check www.smc.com for the warranty terms in your country/region.

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