SMC2890W-AG / SMC2891W-AG
Elite Connect™
802.11a/g Outdoor Enterprise Access Point

OVERVIEW

The EliteConnect™ 802.11a/g Wireless Outdoor Access Point/Bridge is designed to bridge two or more wired LANs (usually located in different buildings), while simultaneously providing wireless access to local or remote users. The SMC2890W-AG/SMC2891W-AG incorporates a dual radio architecture to bridge over one wireless band and provide wireless client access over the other band. The Dual-Band Outdoor Access Point/Bridge is completely weatherproof and capable of being installed in a wide variety of different environments. It comes in two models, SMC2890W-AG and SMC2891W-AG, the latter with built-in 17dBi 5GHz antenna and uses Wireless Distribution System (WDS) to allow bridging between remote locations. Up to 6 WDS Bridge links are supported to remote LANs and branch locations. Using dual radio architecture allows for different bridging options using either the 802.11a or 802.11b/g wireless band. As an alternative if the bridging functionality is not required you can use both 802.11a and 802.11b/g in access point mode.

Security is the main concern for customers regarding enterprise wireless networking. The EliteConnect™ Universal 2.4GHz/5GHz Outdoor Access Point/Bridge provides enterprise level advanced authentication and encryption security features. Security features include 64/128/152-bit WEP, 128-bit Advanced Encryption Standard (AES), Wi-Fi Protected Access (WPA/WPA2) and authentication using 802.1x. SMC2890W-AG / SMC2891W-AG also supports disable SSID Broadcast, Client Isolation, and MAC filtering. SMC2890W-AG / SMC2891W-AG allows easy management options through HTTP, SNMP, and Telnet. Web based network management tools make configuration and remote management of the network simple. SNMP allows for easy integration into your existing wired network and management infrastructure. Telnet uses command line interface for local or remote management. Other management features include Systlog and local Event Logging. The Dual-Band Outdoor Bridge comes with available antenna connections to add optional SMC high gain antennas to extend your wireless coverage and range. The SMC2890W-AG has the option for both 802.11a and 802.11g high gain antenna options. The SMC2891W-AG has a 17dBi built-in 802.11a flat panel antenna and optional 802.11g antenna. SMC's line of high gain antennas offers the flexibility and reliability that customers require. Other key Enterprise level features include Spanning-Tree support and RSTP (Received Signal Strength Indicator). Spanning Tree can be used to detect and prevent network loops in your Wireless LAN. This ensures only one route exists between any two points on a network and can allow for Redundancy. In case one link goes down, RSTP is built into the web interface allowing a user to view the Signal to Noise ratio between two bridge links, thus enabling better antenna alignment and link monitoring.

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<tr>
<th>FEATURES</th>
<th>BENEFITS</th>
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<tr>
<td>IEEE 802.11b, 802.11a compliant</td>
<td>Wi-Fi Compliant</td>
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<tr>
<td>High data rates up to 54 Mbps in 802.11g and up to 108 Mbps in 802.11a with Turbo mode</td>
<td>High-performance 54Mbps high data rates</td>
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<tr>
<td>Connects up to 6 remote LANs</td>
<td>Instant access to shared information and resources in remote LANs</td>
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<tr>
<td>Support up to 64 users</td>
<td>Ability to share one high speed internet connection</td>
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<tr>
<td>Advanced wireless security and encryption</td>
<td>Advanced wireless security including 64/128/152-bit WEP encryption, WPA, 802.1x, disable SSID broadcast, client isolation to black client to client communication, and MAC filtering</td>
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<tr>
<td>Flexible Management features including HTTP, Telnet, TFTP,SNMP, Systlog, and Event Logging</td>
<td>Simple to use device management options including web-based management, TFTP, Telnet, Systlog, and SNMP</td>
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<tr>
<td>Wireless Distribution System (WDS)</td>
<td>Flexible Bridging configuration options including point to point and point to multi point</td>
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## TECHNICAL SPECIFICATIONS

### SMC2890W-AG / SMC2891W-AG

#### NETWORK CONFIGURATION
- Bridge Mode: Point-to-Point, Point-to-Multipoint, Wireless Distribution System (WDS)
- Access Point Mode: Infrastructure Mode

#### MAXIMUM CLIENTS
- 128 in Access Point Mode (64 per radio interface)

#### PHYSICAL PORTS
- SMC2890W-AG
  - 1-port 10/100Mbit/s Fast Ethernet with support for Power over Ethernet (PoE)
  - 1-port Management Console
  - 2x N-type antenna connectors, 2.4GHz for 802.11b/g
  - 2x N-type antenna connector, 5GHz for 802.11a
- SMC2891W-AG
  - 1-port 10/100Mbit/s Fast Ethernet with support for Power over Ethernet (PoE)
  - 1-port Management Console
  - 2x N-type antenna connector, 2.4GHz for 802.11b/g
  - 1x N-type antenna connector, 5GHz for 802.11a

#### LED INDICATORS
- PWR (Power), Link (Ethernet Link Activity), 11a and 11g (Wireless Link Activity)
- Built-in RSSI Meter (Receive Signal Strength Indicator)

#### ADDITIONAL PACKAGE CONTENT
- 38 ft / 30 m LAN/Pot cable with RJ-45 and special outdoor connector
- 5 ft / 1.5 m console cable with RS-232 and special outdoor connector
- Power over Ethernet (PoE) Injector
- Outdoor pole- and wall-mounting bracket kit

#### DATA RATES
- 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps, Turbo Mode: up to 108 Mbps
- 802.11g: 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps
- 802.11b: 1, 2, 5.5, 11 Mbps

#### MAXIMUM CHANNELS
- 802.11a
  - US & Canada: 12 (base mode), 5 (turbo mode)
  - Europe 11 channels (base mode, 4 turbo mode)
  - Japan: 4 (base mode)
- 802.11g/b
  - US & Canada: 11 (base mode)
  - Europe: 13 channels (base mode)
  - Japan: 14 (base mode)

#### OPERATING FREQUENCY
- 802.11a
  - US/Canada: 5.15 – 5.35 GHz, 5.725 – 5.825 GHz
  - Europe: 5.15 – 5.35 GHz, 5.47 – 5.825 GHz
  - Japan: 4.9 – 5 GHz
- 802.11bg
  - US/Canada: Europe 2400 – 2483.5 MHz
  - Japan: 2600 – 2697 MHz
  - Dynamic Frequency Selection (DFS)

#### MODULATION TYPES
- 802.11a: BPSK, QPSK, 16-QAM, 64-QAM
- 802.11b/g: DSSS, BPSK, QPSK, OFDM

#### SENSITIVITY
- 802.11a: -71dBm/954Mbps (5.150 – 5.350GHz)
- 802.11g: -73dBm/854Mbps
- 802.11b: -90dBm/11Mbps

#### TRANSMIT POWER
- 802.11a: 12.5dBm/954Mbps (5.150 – 5.250GHz)
- 802.11g: 16dBm/954Mbps
- 802.11b: 20dBm/11Mbps
- Transmit Power Control (TPC)

#### SECURITY
- 64/128/153-bit WEP Encryption
- Wi-Fi Protected Access (WPA/ WPA2)
- IEEE802.1x Authentication
- MAC Address Filtering
- Access Control Lists (ACL)

#### MANAGEMENT
- Web-based Management, HTTP/HTTPS
- SNMP Management
- 802.1d Spanning Tree
- VLAN
- TELNET console interface
- Configuration file upload/download by FTP/TFTP and SNMP
- System watchdog
- SysLog

#### PHYSICAL SIZE
- 2.7 x 7.5 x 2.9 in / 19.5 x 19 x 7.4 cm

#### WEIGHT
- 3.4 lbs/ 1.54kg

#### BUILT-IN ANTENNA (SMC2891W-AG ONLY)
- 17dBi Flat Panel Antenna
- Frequency Range: 4.9 – 5.875 GHz
- Gain: 17dBi
- VSWR: 2.0 : 1 max
- Polarization: Linear: vertical/horizontal
- HPBW: Horizontal: 18°
- Impedance: 50 Ohms

#### POE INJECTOR
- Input: 90 – 264 AC, 47 to 63Hz
- Output: 48VDC, 1.2A
- Conducted EMI: CISPR/ FCC Class B
- Short Circuit Protection: Auto-Recovery
- Over Voltage Protection: Auto-Recovery
- Dimensions: 9.9 x 2.7 x 1.8 in / 13 x 7 x 4 cm

#### TEMPERATURE
- Operating: -40 to 104 °C (-40 to 140 °F)
- Storage: -55 to 80°C (-67 to 176 °F)
- non-condensing @ 5 to 50°C
- non-condensing @ 5 to 70°C

#### HUMIDITY
- 15% to 95% (non-condensing)

#### STANDARDS
- IEEE 802.3, IEEE 802.3u, IEEE 802.11a, b, g

#### SAFETY
- UL/ULC (CSA60950-1, UL60950-1)
- CB (IEC 60950-1)
- UL/CSA (CSA60950-1)
- ICES-003 (Canada)

#### WIRELESS RADIO/REGULATORY CERTIFICATION
- ETSI 300 328 (11bg), 301 893 (11a Full range), 301 489 (DC power)
- FCC Part 15, 15.247/15.207 (11bg), Part 15E 15.407 (11a Full range)
- Wi-Fi, DECT, RSSi201(Canada), C-Tick

#### ELECTROMAGNETIC COMPATIBILITY
- CE Class B (EN55022), CE EN55024
- ICE61000-3-2, ICE61000-3-3, ICE61000-4-2, ICE61000-4-3, ICE61000-4-4, ICE61000-4-5, ICE61000-4-6, ICE61000-4-11
- FCC Class B Part 15
- VCCI Class B