

# WA4184 Series Hardened IP66 Outdoor Wireless Access Point

Multiple Channel / Media Converter Systems



## Overview



The WA4184 is an IP66 outdoor wireless access point with wider operating temperature range features. It can be deployed as a wireless mesh, access point, client (client-bridge), or bridge. Each unit supports 802.11a 5 GHz and 802.11b/g 2.4GHz in all modes with up to 54Mbps throughput, plus Turbo A and Super G for higher throughput of 108Mbps. It can be managed and configured from a Web interface via LAN port or WLAN interface. For secure communication, the WA4184 provides WEP, WPA, or WPA2-802.11i with 128 AES encryption in AP and client modes. Bridge mode has proprietary AES-based encryption. With its IP66 weatherproof case and multi-functional wireless features the WA4184 is ideal for outdoor communications applications.

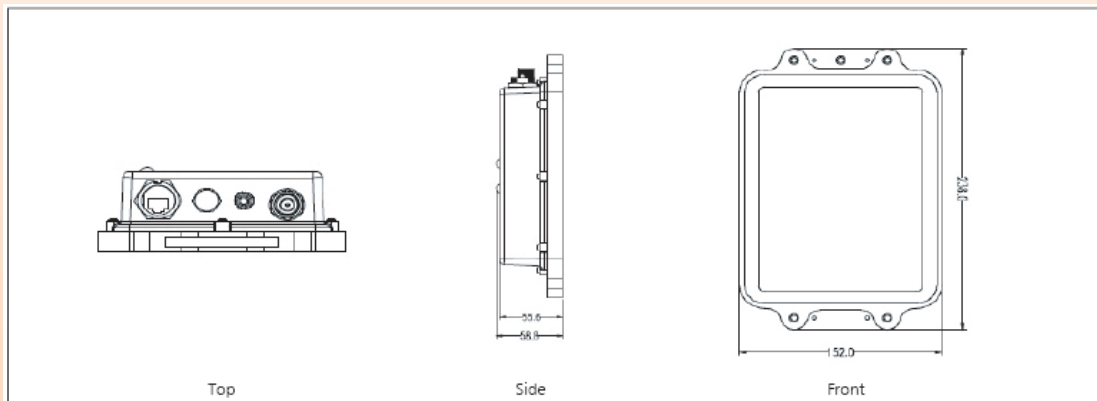
## Features

- WLAN interface supports up to 54Mbps throughput, plus Turbo A and Super G for higher throughput of 108 Mbps
- Various kinds of operation modes supported: AP/ Bridge(WDS)/ AP-Client/ Mesh
- IP66 weatherproof specification sustains harsh environment application
- Operating temperature from -30°C to 70°C, test at -40°C to 80°C
- WEP/WPA/WPA2-802.11i with 128 AES in AP and client modes
- Proprietary AES-based encryption in Bridge mode
- Detects and reports rogue APs through E-mail
- Web server/ HTTPS/ SNMP Agent/ SNMP Trap supported secured management
- Provides IP table to prevent access from unauthorized IP address

## Ordering Information

WA4184      Hardened IP66 Outdoor Wireless Access Point

## Diagrams



## Specifications

### Technology

- Standards:**
- IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX, IEEE802.3x
- Forward and Filtering Rate:**
- 14,880pps for 10Mbps
  - 148,810pps for 100Mbps
- Processing Type:**
- Store-and-Forward
  - Half-duplex back-pressure and IEEE802.3x Full-duplex flow control

### Power

- Input:**
- Input Voltage: 24VDC (110-240VAC PSU Provided)  
(PoE Injector and Power Adapter is included within the package)
- Power Consumption:**
- 12W

### Mechanical

- Casing:**
- Aluminium case
  - IP 66
- Dimensions:**
- 152mm (W) x 238mm (D) x 58.8mm (H)  
(5.98" (W) x 9.37" (D) x 2.31" (H))

### Weight:

- 1.13Kg (2.5lb.)

### Installation:

- Panel mount (The panel mounting kit is included within the package)

### Interface

- Ethernet Port:**
- 10/100Base-TX: 1 port

### LED Indicators:

- Per Unit: Power Status
- Per Port: WLAN

### Wireless LAN:

- Standard Compliance:
  - IEEE802.11a/b/g for Wireless LAN
  - IEEE802.11i for Wireless Security
  - IEEE802.1D for Spanning Tree Protocol
  - IEEE802.1h for Dynamic Frequency Selection/ Transmit Power

### Control

- Spread Spectrum and Modulation:
  - DSSS with DBPSK, DQPSK, CCK
  - OFDM with BPSK, QPSK, 16QAM, 64QAM
- Transmission Rates:
  - 802.11b: 1, 2, 5.5, 11 Mbps
  - 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
  - 802.11g Super: 72, 96, 108 Mbps
  - 802.11a Turbo: 72, 96, 108 Mbps
- TX Power:
  - 802.11b: 19dBm +/- 3dBm at all rates
  - 802.11g: 19dBm +/- 3dBm at 6 to 24Mbps
  - 802.11a: 18dBm +/- 2dBm at 6 to 24Mbps
- RX Sensitivity:
  - 802.11b: -93dBm at 1Mbps; -88dBm at 11Mbps
  - 802.11g: -89dBm at 6Mbps; -70dBm at 54Mbps
  - 802.11a: -84dBm at 6Mbps; -68dBm at 54Mbps

- Encryption Security:
  - WEP: (64-bit, 128-bit and 152-bit)
  - WPA-PSK
  - WPA (IEEE802.1x) - Dynamic Key Authentication supported
- WPA2: IEEE802.11i
  - AES- CCMP
  - Enable/disable broadcast SSID
  - MAC address filtering
- Rogue wireless AP detection with email notification

### Default Antenna:

- 4.5/7 dBi, 2.4/5 GHz dual-band omni-direction, N-type (male)

### LAN Network Mode:

- Wireless Access Point (WAP)
- Wireless Client (STA)
- Wireless Bridge (WDS)

### Environment

#### Operating Temperature:

- 30°C to 70°C (-22°F to 158°F)
- Test @ -40°C to 80°C (-40°F to 176°F)

#### Storage Temperature:

- 40°C to 80°C (-40°F to 176°F)

#### Ambient Relative Humidity:

- 5% to 95% (non-condensing)

### Regulatory Approvals:

#### ISO:

- Manufactured in an ISO9001 facility

#### Emission Compliance:

- CE Mark Class A, FCC Part 15 Class A

#### Environmental Test Compliance:

- IEC60068-2-6 Fc (Vibration Resistance)
  - 5g @ 10~150Hz, Amplitude 0.35mm  
(Operation/Storage/Transport)
- IEC60068-2-27 Ea (Shock)
  - 25g @ 11ms (Half-Sine Shock Pulse; Operation)
  - 50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)
- IEC60068-2-32 Ed (Free Fall)
  - 1M (3.281ft.)

