WAC-2004 Series

Industrial wireless access controllers

Features and Benefits

- 2-in-1 AP controller and mobile IP home agent

- Millisecond-level controller-based Turbo Roaming

- IEEE 802.11i-compliant wireless security

- Layer-3 mobile IP technology

- Up to 450 Mbps throughput for tunneling

- Scalable tunneling capacity

Certifications

Introduction

The WAC-2004 wireless access controller provides a seamless roaming experience for Moxa's access points distributed wireless networks. It uses Moxa's controller-based Turbo Roaming technology to achieve millisecond-level roaming over different IP subnets. The combination of an advanced roaming algorithm and mobile IP technology allows wireless clients to roam between different IP subnets within milliseconds, while maintaining stringent security in extremely demanding environments. WAC-2004 also supports 1-to-1 hot backup to help make your network more reliable. The WAC-2004 is rated to operate at temperatures ranging from 0 to 50°C, and is rugged enough for installation in any harsh industrial environment.

Maximum Availability

- Device-level redundancy via hot standby controller

Minimum Handover Time

- Millisecond-level Turbo Roaming
- Inter-controller roaming

Maximum Mobility in L3 Networks

- Mobile IP tunneling
- Care-of-Address (CoA) assignment
- Cross layer 3 subnet roaming

Specifications

Ethernet Interface

10/100/1000BaseT(X) Ports (RJ45 connector)	1
Standards	IEEE 802.1X for authentication IEEE 802.3 for 10BaseT IEEE 802.3ab for 1000BaseT(X)
Total Port Count	4
Highest Speed	1G

Ethernet Software Features

Management	IPv4, SNMPv1/v2c/v3, Syslog, TCP/IP, Telnet, TFTP, Web Console, Wireless Search Utility
Security	HTTPS/SSL, RADIUS, SSH
Time Management	NTP Client, SNTP

Serial Interface

Console Port	RS-232 ports x 1 (DB9 male)
Flow Control	RTS/CTS, XON/XOFF
Parity	None, Even, Odd, Space, Mark

Serial Signals

RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

Wireless Access Control

Controller Failover Mode	1-on-1 hot backup
Handover Time	50 ms
Roaming Support	Turbo Roaming (L2/L3) with inter-controller capabilities
WLAN Products Supported	200 radios

Power Parameters

Input Current	1.2 A @ 100 VAC
Input Voltage	100 to 240 VAC
No. of Power Inputs	2
Operating Voltage	100 to 240 VAC

Physical Characteristics

Housing	Metal
IP Rating	IP30
Dimensions (without ears)	440 x 44 x 325 mm (17.32 x 1.73 x 12.80 in)
Weight	5,480 g (12.08 lb)
Installation	19-inch rack mounting

Environmental Limits

Operating Temperature	0 to 50°C (32 to 122°F)

Standards and Certifications

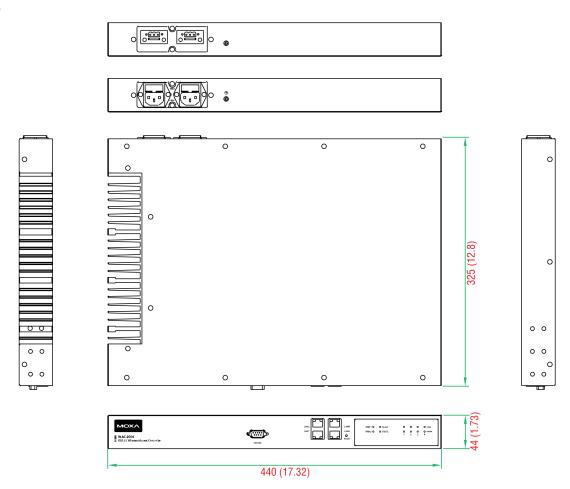|	
EMC	EN 55032/24, EN 61000-6-2/-6-4
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF
Safety	IEC 60950-1, UL 60950-1

MOXA
Reliable Networks ▲ Sincere Service

Declaration

Green Product	RoHS, CRoHS, WEEE

MTBF

Time	383,478 hrs
Standards	Telcordia SR332

Warranty

Warranty Period	3 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x WAC-2004 Series wireless access controller
Installation Kit	4 x cap, plastic, for RJ45 port 2 x rack-mounting ear
Cable	1 x DB9 female to RJ45 10-pin
Power Supply	1 x power cord, C13-type, US or EU type
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)

325 (12.8)

44 (1.73)

440 (17.32)

Ordering Information

Model Name	Application	Operating Temp.	Indoor/Outdoor, IP Code
WAC-2004	Wireless Access Controller	0 to 50°C	Indoor, IP30