WAC-1001 Series

Industrial wireless access controllers

Features and Benefits

- Redundant 12 to 48 VDC power inputs
- Controller-based Turbo Roaming (less than 50 ms)
- Supported models: AWK-RTG Series, TAP Series
- IEEE 802.11i-compliant wireless security
- DIN-rail mounting or wall mounting (optional) for on-site installation
- -40 to 75°C operating temperature range (-T model)

Certifications

c(UL)us LISTED   CE   FC

Introduction

The WAC-1001 wireless access controller provides a seamless roaming experience for Moxa's access points in distributed wireless networks. It uses Moxa's controller-based Turbo Roaming technology to achieve less than 50 ms roaming handover times on up to three channels. This advanced roaming capability securely hands off clients at speeds so high that wireless clients can enjoy seamless roaming between APs, with virtually no interruption in connectivity. WAC-1001 also supports 1-to-1 hot backup function to help make your network more reliable. Wide-temperature models that can operate in -40 to 75°C are also available.

Maximum Availability

- Enables millisecond-level Turbo Roaming
- Configuration backup
- Dual redundant DC power inputs

Advanced Security

- IEEE802.1X/RADIUS supported
- WPA/WPA2/802.11i supported
- Integrated DI/DO for on-site monitoring and warnings

Specifications

Input/Output Interface

Alarm Contact Channels	1 relay output with current carrying capacity of 1 A @ 24 VDC

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) IEEE 802.3af for PoE IEEE 802.3u for 100BaseT(X)
Total Port Count	1
Highest Speed	1G
Connections	PoE

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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 (TxD, RxD, GND), 8-pin RJ45 (115200, n, 8, 1)
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
WLAN Products Supported	110 radios

Power Parameters

Input Current	0.6 A @ 12 VDC, 0.15 A @ 48 VDC
Input Voltage	12 to 48 VDC, Redundant dual inputs
Source of Input Power	PoE (IEEE 802.3af)

Physical Characteristics

Housing	Metal
IP Rating	IP30
Dimensions (without ears)	52.85 x 135 x 105 mm (2.08 x 5.32 x 4.13 in)
Weight	1,060 g (2.34 lb)
Installation	DIN-rail mounting, Wall mounting (with optional kit)

Environmental Limits

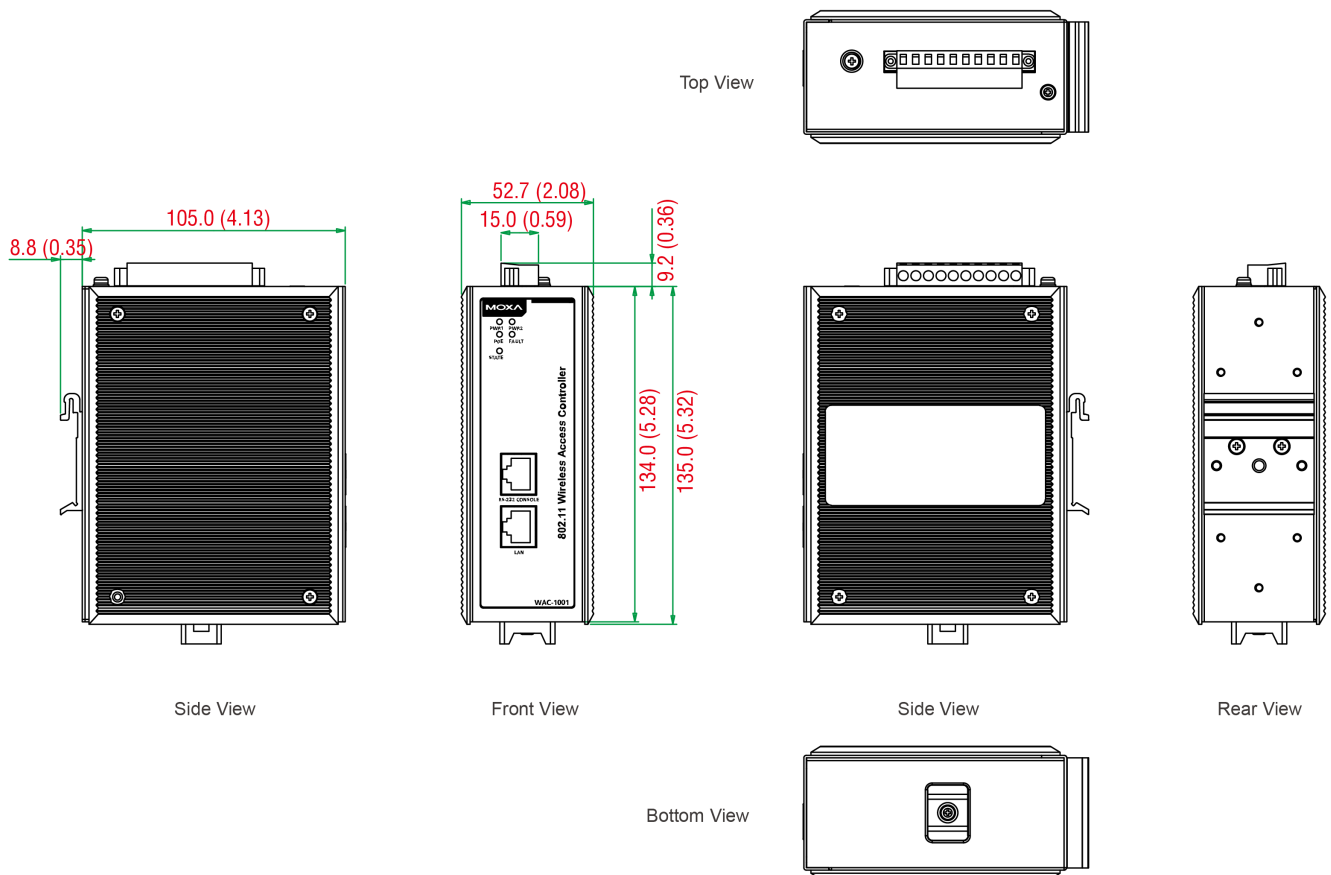|	
Operating Temperature	Standard Models: -10 to 60°C (14 to 140°F) Wide Temp. Models: -40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMC	EN 55032/24
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: 2 kV; Signal: 1 kV IEC 61000-4-5 Surge: Power: 2 kV; Signal: 1 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8 PFMF

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Railway	EN 50121-4, EN 50155
Safety	EN 60950-1, IEC 60950-1, UL 60950-1

Declaration

Green Product	RoHS, CRoHS, WEEE

MTBF

Time	447,425 hrs
Standards	Telcordia SR332

Warranty

Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x WAC-1001 Series wireless access controller
Installation Kit	1 x cable holder with screw 2 x cap, plastic, for RJ45 port
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)

Top View

Side View

Front View

Side View

Rear View

Bottom View

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Ordering Information

Model Name	Application	Operating Temp.	Indoor/Outdoor, IP Code
WAC-1001	Wireless Access Controller	0 to 60°C	Indoor, IP30
WAC-1001-T	Wireless Access Controller	-40 to 75°C	Indoor, IP30

Accessories (sold separately)

Mounting Kits

WK-51-01	Wall mounting kit with 2 plates (51.6 x 67 x 2 mm) and 6 screws