WAC-1001

Industrial Wireless Access Controller

> Power input by redundant 24 VDC power inputs
> Less-than-50ms Turbo Roaming for seamless wireless connection
> IEEE802.11i-compliant Wireless security
> DIN-Rail or wall mounting ability for onsite installation
> IP30 protected high-strength metal housing
> -40 to 75°C operating temperature range (-T model)

: Introduction

The goal of zero-latency-roaming is to create clients that can maintain communications seamlessly as they move from one access point to another. Moxa has introduced next generation Turbo Roaming technology with the WAC-1001 for the 50ms-roaming-enabled AWK series. This advanced roaming capability delivers high-speed secure handoffs. Wireless clients can roam between APs in under 50 milliseconds while preserving robust security in extremely demanding environments.

Maximum Availability
- Less-than-50ms Turbo Roaming
- Configuration back-up
- Dual redundant DC power inputs

Advanced Security
- IEEE802.11X/RADIUS supported
- WPA/WPA2/802.11i supported
- Integrated DI/DO for on-site monitoring and warning

: Specifications

WLAN Interface
Standards:
IEEE 802.11i for Wireless Security
IEEE 802.3u for 10/100BaseT(X)
IEEE 802.3af for Power-over-Ethernet
Supported Models:
AWK-3121-RS series
AWK-4121-RS series
AWK-5222-RS series
AWK-6222-RS series
Security:
WPA /WPA2-Personal and Enterprise (IEEE 802.1X/RADIUS, TKIP and AES)

Interface
LAN Port: 10/100BaseT(X) auto negotiation speed (RJ45-type)
Console: RS-232 (RJ45-type)
LED Indicators: PWR1, PWR2, PoE, FAULT, STATE, 10M, 100M
Alarm Contact: 1 relay output with current carrying capacity of 1 A @ 24 VDC
Digital Inputs: 2 electrically isolated inputs
• +13 to +30 V for state "1"
• +3 to -30 V for state "0"
• Max. input current: 8 mA

Physical Characteristics
Housing: Metal, providing IP30 protection
Weight: 700 g
Dimensions: 53.6 x 135 x 105 mm
Installation: DIN-Rail mounting, wall mounting

Environmental Limits
Operating Temperature:
- Standard Models: 0 to 60°C
- Wide Temp. Models: -40 to 75°C
Storage Temperature: -40 to 85°C
Ambient Relative Humidity: 5% to 95% (non-condensing)

Power Requirements
Input Voltage: 12 to 48 VDC, redundant dual DC power inputs or 48 VDC Power-over-Ethernet (IEEE 802.3af compliant; optional)
Connector: 10-pin removable terminal block
Power Consumption:
• 0.121 to 0.494 @12 to 48 VDC
• 0.3 A @ 24 VDC
Reverse Polarity Protection: Present

Regulatory Approvals
EMC: FCC Part 15, EN55022/55024, IEC61000-6-2/-4
Environmental/EMC Compliancy: EN50155, EN50121-1/-4
Safety: UL 60950-1, EN 60950-1
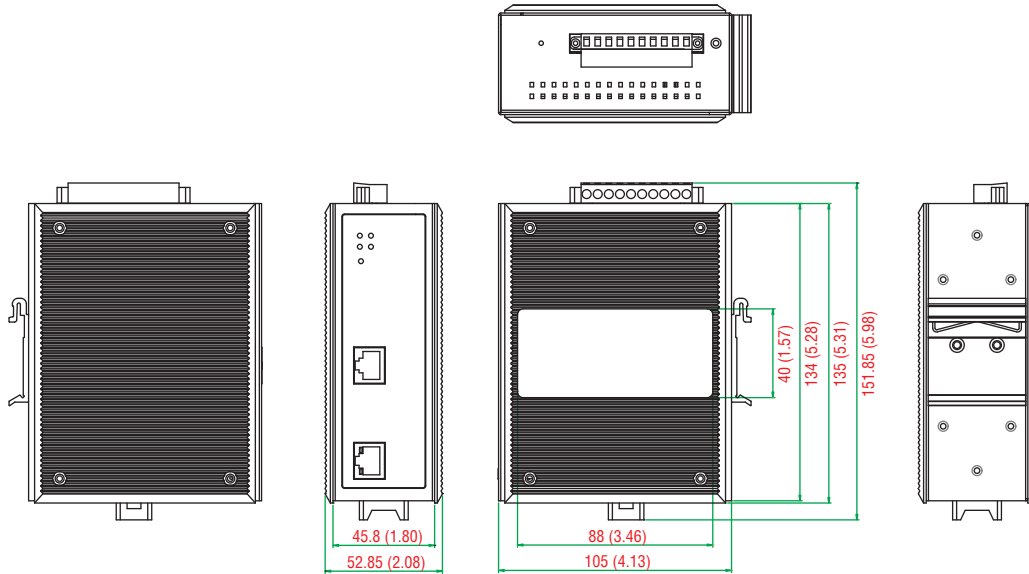Note: Please check Moxa's website for the most up-to-date certification status.

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

Dimensions

Unit: mm (inch)

40 (1.57)
134 (5.28)
135 (5.31)
151.85 (5.98)
45.8 (1.80)
52.85 (2.08)
88 (3.46)
105 (4.13)

: Ordering Information

Available Models

WAC-1001: Industrial wireless access controller, 0 to 60°C operating temperature
WAC-1001-T: Industrial wireless access controller, -40 to 75°C operating temperature

Package Checklist

- WAC-1001 wireless controller
- Wall mounting kit
- Cable holder with one screw
- 2 protective caps
- Software CD
- Quick installation guide (printed)
- Warranty card