

# 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 Compliance:** 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.*

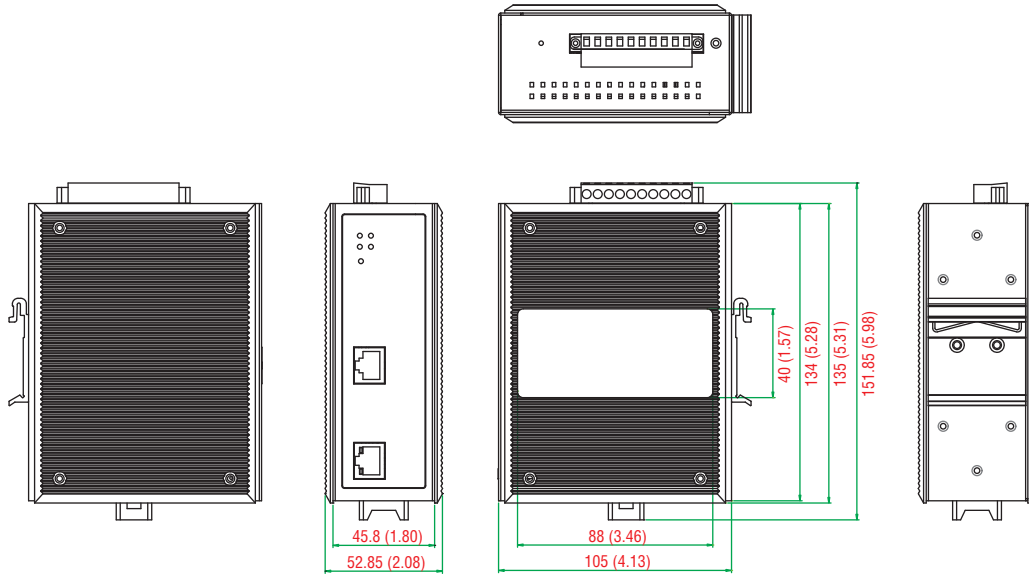
#### Warranty

**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

## Dimensions

Unit: mm (inch)



## 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