# WAC-1001

# - Industrial Wireless Access Controller



## **:** 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.

# : 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: 52.85 x 135 x 105 mm (2.08 x 5.31 x 4.13 in) Installation: DIN-Rail mounting, wall mounting

#### **Maximum Availability**

- Less-than-50ms Turbo Roaming
- Configuration back-up
  - 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

#### Environmental Limits Operating Temperature:

Standard Models: 0 to 60°C (32 to 140°F) Wide Temp. Models: -40 to 75°C (-40 to 167°F) Storage Temperature: -40 to 85°C (-40 to 185°F) 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) Connector: 10-pin removable terminal block Power Consumption:

• 12 to 48 VDC, 0.121 to 0.494 A

# • 24 VDC, 0.3 A

#### Reverse Polarity Protection: Present Standards and Certifications

Safety: UL 60950-1, EN 60950-1

EMC: FCC Part 15 Subpart B Class A, EN 55022/55024

Rail Traffic: EN 50155, EN 50121-1/4

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



# **Crdering 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
- DIN-Rail kit
- Documentation and software CD
- Quick installation guide (printed)
- · Warranty card