

Moxa AWK-3131A-US

User Manual: MOXA AWK-3131A-US Industrial Wireless AP/Bridge/Client

Model: AWK-3131A-US | Brand: Moxa

1. PRODUCT OVERVIEW

The MOXA AWK-3131A-US is an industrial-grade wireless access point, bridge, and client designed for robust and reliable wireless communication in demanding environments. It supports IEEE 802.11a/b/g/n standards, operating within the US band, and is built to withstand temperatures from -25°C to 60°C.

Key Features

- IEEE 802.11a/b/g/n AP/bridge/client support
- Seamless roaming with Turbo Roaming
- Complete redundancy with AeroLink Protection
- Integrated antenna and power isolation
- 5 GHz DFS channel support

2. PRODUCT VISUALS



Figure 2.1: Front view of the MOXA AWK-3131A-US, showing the antenna, Ethernet ports, and status indicators. The device features a robust metal casing suitable for industrial applications.

3. SETUP GUIDE

Follow these steps to set up your MOXA AWK-3131A-US device:

1. **Unpacking and Inspection:** Carefully unpack the device and all accessories. Inspect for any physical damage. If any damage is found, contact your vendor immediately.
2. **Mounting:** The AWK-3131A-US can be DIN-rail mounted or wall-mounted. Ensure the mounting location is stable, well-ventilated, and within the specified operating temperature range. Refer to the mounting kit instructions for detailed steps.
3. **Power Connection:** Connect the device to a suitable DC power source (e.g., 12-48 VDC) using the provided terminal block. Ensure correct polarity. Verify the power LED illuminates upon connection.
4. **Network Connection:** Connect an Ethernet cable from your network switch or router to one of the Ethernet ports on the AWK-3131A-US.
5. **Antenna Installation:** Securely attach the included antenna(s) to the antenna connectors on the device. Ensure they are tightened to prevent signal loss.
6. **Initial Configuration:** Access the device's web-based management interface via a web browser using its default IP address (refer to the quick installation guide for the default IP). Log in with the default credentials and proceed with network configuration.

4. OPERATION

The MOXA AWK-3131A-US can operate in various modes to suit different network requirements:

- **Access Point (AP) Mode:** Allows wireless clients to connect to your wired network. Configure SSID, security settings (WPA2/WPA3 recommended), and channel.
- **Bridge Mode:** Connects two wired networks wirelessly, acting as a transparent bridge. Useful for extending Ethernet segments without running cables.
- **Client Mode:** Enables the device to connect to an existing wireless access point, effectively making a wired device wireless.

All operational modes and advanced settings, including Turbo Roaming and AeroLink Protection, are configured through the web management interface. Refer to the comprehensive user manual for detailed configuration instructions for each mode and feature.

5. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your AWK-3131A-US:

- **Cleaning:** Periodically clean the device's exterior with a soft, dry cloth. Do not use liquid cleaners or solvents. Ensure ventilation openings are free from dust and debris.
- **Firmware Updates:** Check the Moxa official website regularly for firmware updates. Applying the latest firmware can improve performance, add new features, and address security vulnerabilities. Follow the provided instructions carefully during the update process.
- **Environmental Monitoring:** Ensure the operating environment remains within the specified temperature and humidity ranges. Extreme conditions can affect device performance and lifespan.
- **Cable Inspection:** Periodically inspect all connected cables (power, Ethernet, antenna) for signs of wear or damage. Replace any damaged cables immediately.

6. TROUBLESHOOTING

This section provides solutions to common issues you might encounter:

Problem	Possible Cause	Solution
Device does not power on	No power supply; incorrect voltage; faulty power cable	Check power source, verify voltage, inspect power cable for damage.
Cannot access web interface	Incorrect IP address; network configuration issue; firewall blocking access	Verify device IP, ensure PC is in the same subnet, temporarily disable PC firewall. Try resetting to factory defaults if necessary.
Poor wireless signal or connectivity	Antenna not properly connected; interference; distance; obstacles	Ensure antennas are securely attached. Check for sources of interference. Relocate device or client for better line of sight.
Wireless clients cannot connect	Incorrect SSID or password; security settings mismatch	Verify SSID and password. Ensure client's security settings match the AP's (e.g., WPA2-PSK).

7. TECHNICAL SPECIFICATIONS

Specification	Value
Model Number	AWK-3131A-US
Brand	Moxa
Package Dimensions	7.95 x 6.57 x 3.7 inches
Item Weight	2 pounds
ASIN	B078YG2VWT
Hardware Interface	802.11 b/g/n
Data Link Protocol	IEEE 802.11n
UPC	613739924365
Manufacturer	Moxa Inc.
First Available Date	January 11, 2018

8. WARRANTY AND SUPPORT

The MOXA AWK-3131A-US comes with a standard manufacturer's warranty. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Moxa website.

For technical support, troubleshooting assistance, or to report issues, please contact Moxa customer support through their official website or the contact information provided in your product documentation. When contacting support, please have your product model number (AWK-3131A-US) and serial number ready.

Online resources such as FAQs, knowledge bases, and driver downloads may also be available on the Moxa support portal.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question