

# AWK-1100 Series

*Industrial IEEE 802.11g/b wireless Access Point/Bridge/AP Client*



- > IEEE 802.11g/b compliant
- > Power input by redundant 24 VDC power inputs or Power-over-Ethernet
- > Powerful security with WPA/802.1X/MAC address filtering
- > DIN-Rail or panel mounting ability
- > IP30 protected high-strength metal housing



The certification logos shown here apply to some or all of the products in this section. Please see the **Specifications** section or Moxa's website for details.

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## Introduction

Are your industrial applications hard to wire, or are your wiring costs out of control? Are you already using mobile equipment that connects over a TCP/IP network? If so, then the AWK-1100 Access Point/Bridge/AP Client could be what you're looking for. The AWK-1100 is rated to operate at temperatures ranging from 0 to 60°C and is rugged enough for any harsh industrial environment. Installation is easy, with either DIN-Rail mounting or distribution boxes. The DIN-Rail mounting ability, wide operating temperature range, and IP30 housing with LED indicators make the AWK-1100 a convenient yet reliable solution for any industrial wireless application.

- 64-bit and 128-bit WEP (Wired Equivalent Privacy)
- Enable/disable SSID broadcasts
- MAC-address-based access control
- IEEE 802.1X/RADIUS
- WPA (Wi-Fi Protected Access)

### Useful Utilities and Remote Configuration

- Firmware upgrade from TFTP or HTTP
- Web-based Management
- Supports SNMP and UPnP
- Configuration backup and reset

## Advanced Security Capability

## Specifications

### WLAN

#### Standards:

IEEE 802.11g/b for Wireless LAN  
IEEE 802.3u 10/100BaseT(X) for Ethernet LAN  
IEEE 802.3af for Power-over-Ethernet

#### Frequency Range:

2.4-2.4835 GHz, Direct Sequence Spread Spectrum (DSSS)

#### Data Rate & Modulation:

OFDM @ 54 Mbps, CCK @ 11/5.5 Mbps, DQPSK @ 2 Mbps, and DBSK @ 1 Mbps

#### Operating Channels:

USA: 1-11 (US)  
Europe: 1-13 (EU)  
Japan: 1-14 (JP)

#### Security:

64-bit and 128-bit WEP encryption, WPA (IEEE 802.1X/RADIUS and TKIP)

#### Data Rates:

1 Mbps, 2 Mbps, 5.5 Mbps, 6 Mbps, 9 Mbps, 11 Mbps, 12 Mbps, 18 Mbps, 24 Mbps, 36 Mbps, 48 Mbps, 54 Mbps

#### Transmit Power:

Typ. +18 dBm (+/- 1.5 dBm) @ 11 Mbps, +14 dBm (+/- 1.5 dBm) @ 54 Mbps

#### RX Sensitivity:

802.11b:  
-81 dBm @ 11 Mbps, -85 dBm @ 5.5 Mbps, -86 dBm @ 2 Mbps, -87 dBm @ 1 Mbps

802.11g:  
-68 dBm @ 54 Mbps, -70 dBm @ 48 Mbps, -74 dBm @ 36 Mbps, -78 dBm @ 24 Mbps, -81 dBm @ 18 Mbps, -84 dBm @ 12 Mbps, -85 dBm @ 9 Mbps, -86 dBm @ 6 Mbps

### Software

**Protocols:** HTTP, DHCP, TCP/IP, RADIUS

**Configuration:** Web-based management

**Client OS Support:** Windows (95, 98, 2000, ME, NT, XP), Unix, Macintosh

### Interface

**Antenna:** 2 dBi omni-directional antenna with an RP-SMA connector

**RJ45 Port:** 10/100BaseT(X) auto negotiation speed

**LED Indicators:** PWR1, PWR2, WLAN, LAN (Link/ACT)

### Power Requirements

**Input Voltage:** 12 to 45 VDC, redundant dual DC power inputs or 48 VDC Power-over-Ethernet (IEEE802.3af)

**Power Consumption:** 0.3 A @ 24 V

**Overload Current Protection:** 1.6 A

**Connection:** Removable terminal block

**Reverse Polarity Protection:** Present

### Physical Characteristics

**Housing:** metal, providing IP30 protection

**Dimensions:** 53.6 x 135 x 105 mm (2.11 x 5.31 x 4.13 in.)

**Weight:** 800 g

**Installation:** DIN-Rail mounting, wall mounting (optional kit)

### Environmental Limits

**Operating Temperature:** 0 to 60°C (32 to 140°F)

**Storage Temperature:** -20 to 70°C (-4 to 158°F)

**Ambient Relative Humidity:** 5% to 95% (non-condensing)

### Regulatory Approvals

**Safety:** EN60950-1, UL60950-1

**Hazardous location:** UL/cUL Class I, Division 2, Groups A, B, C, and D; ATEX Class I, Zone 2, EEx nC IIC (Pending)

**Radio:** EN300 328

**EMC:** EN301 489-1/-17

**EMI:** FCC Part 15C

\*Please check Moxa's website for the most up-to-date certification status.

### Reliability

**MTBF:**

200,000 hrs

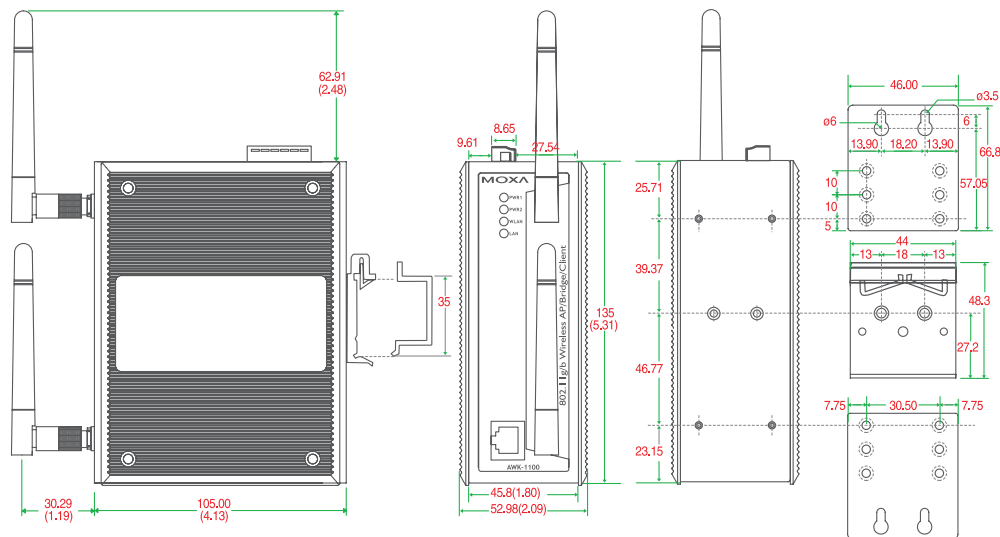
database: MIL-HDBK-217F, GB 25°C

### Warranty

**Warranty Period:** 5 years

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

### Dimensions



### Ordering Information

#### Available Models

**AWK-1100-US:** IEEE 802.11g/b wireless AP/Bridge/AP Client, US band, 0 to 60°C

**AWK-1100-EU:** IEEE 802.11g/b wireless AP/Bridge/AP Client, Euro band, 0 to 60°C

**AWK-1100-JP:** IEEE 802.11g/b wireless AP/Bridge/AP Client, Japan band, 0 to 60°C

#### Optional Accessories (can be purchased separately)

**DR-4524:** 45W/2A DIN-Rail 24 VDC power supply with universal 85 to 264 VAC input

**DR-75-24:** 75W/3.2A DIN-Rail 24 VDC power supply with universal 85 to 264 VAC input

**DR-120-24:** 120W/5A DIN-Rail 24 VDC power supply with 88 to 132 VAC/176 to 264 VAC input by switch

**WK-46:** Wall mounting kit

**RK-4U:** 4U-high 19" rack mounting kit