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.

: 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.

Advanced Security Capability

- 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

: 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 Mpbs, 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

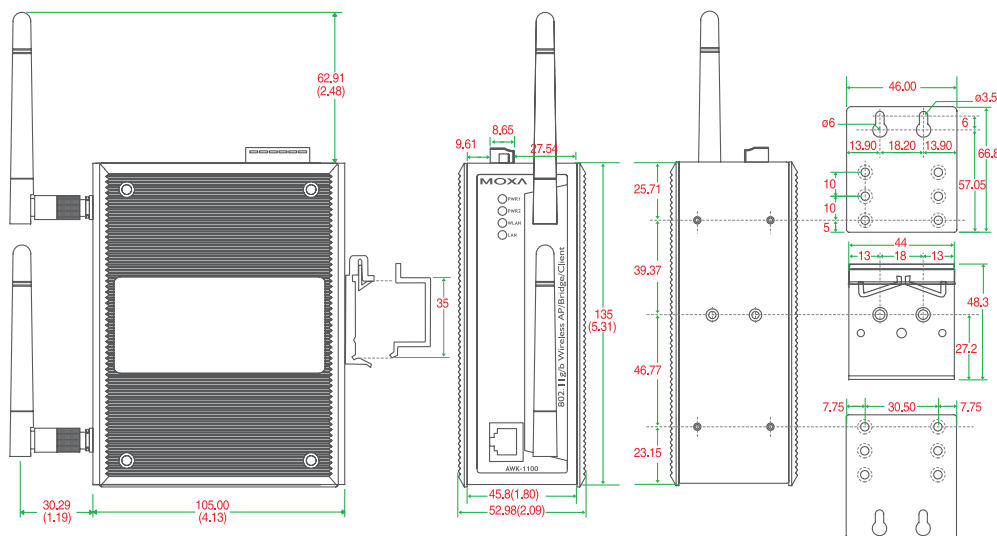*Please check Moxa's website for the most up-to-date certification status.

Reliability

MTBF:
200,000 hrs
database: MIL-HDBK-217F, GB 25°C

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

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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