

# AWK-1100

## Industrial IEEE802.11g/b Wireless Access Point/Bridge/AP Client



### Features

- > IEEE802.11g/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 protection high-strength metal case



### Features

#### Advanced Security Capability

- 64-bit and 128-bit WEP (Wired Equivalent Privacy)
- Enabling/disabling SSID broadcasts
- MAC-address-based access control
- IEEE802.1X/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

#### Industrial-grade Design

- Operating temperature range from 0 to 60°C
- Power input by redundant 24 VDC power inputs or Power-over-Ethernet
- DIN-Rail or panel mounting capability
- Case design meets IP30 protection standard

### Introduction

Do you have some hard-to-wire situations? Do your applications use mobile equipment which is connected over a TCP/IP network? or you have cost concern for installing wire? **Now you have a ideal solution**, the AWK-1100 Access Point/Bridge/AP Client. 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 case with LED indicators make AWK-1100 a convenient and yet reliable solution for your industrial wireless applications.

### Specifications

#### WLAN

##### Standards:

IEEE802.11g/b for Wireless LAN,  
IEEE802.3u 10/100BaseTX for Ethernet LAN,  
IEEE802.3af 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 (IEEE802.1X/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) @ 11Mbps, +14 dBm (+/- 1.5 dBm) @ 54Mbps

#### 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 Features**

**Protocols:** HTTP, DHCP, TCP/IP, RADIUS, DNS, NetBIOS, AppleTalk, and IPX/SPX

**Configuration:** Web-based management

**Client OS Support:** Windows 95/98/2000/ME/NT/XP, Unix, and Macintosh

**Interface**

**Antenna:** 2 dBi diversity antenna with an R-SMA connector

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

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

**Power**

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

**Input Current (@24V):** 0.3A

**Overload Current Protection:** 1.6A

**Connection:** Removable Terminal Block

**Reverse Polarity Protection:** Present

**Mechanical**

**Casing:** IP30 protection, metal case

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

**Weight:** 800 g

**Installation:** DIN-Rail or Wall Mounting (optional kit)

**Environmental**

**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: 2001, 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

**MTBF:** 200,000 hrs

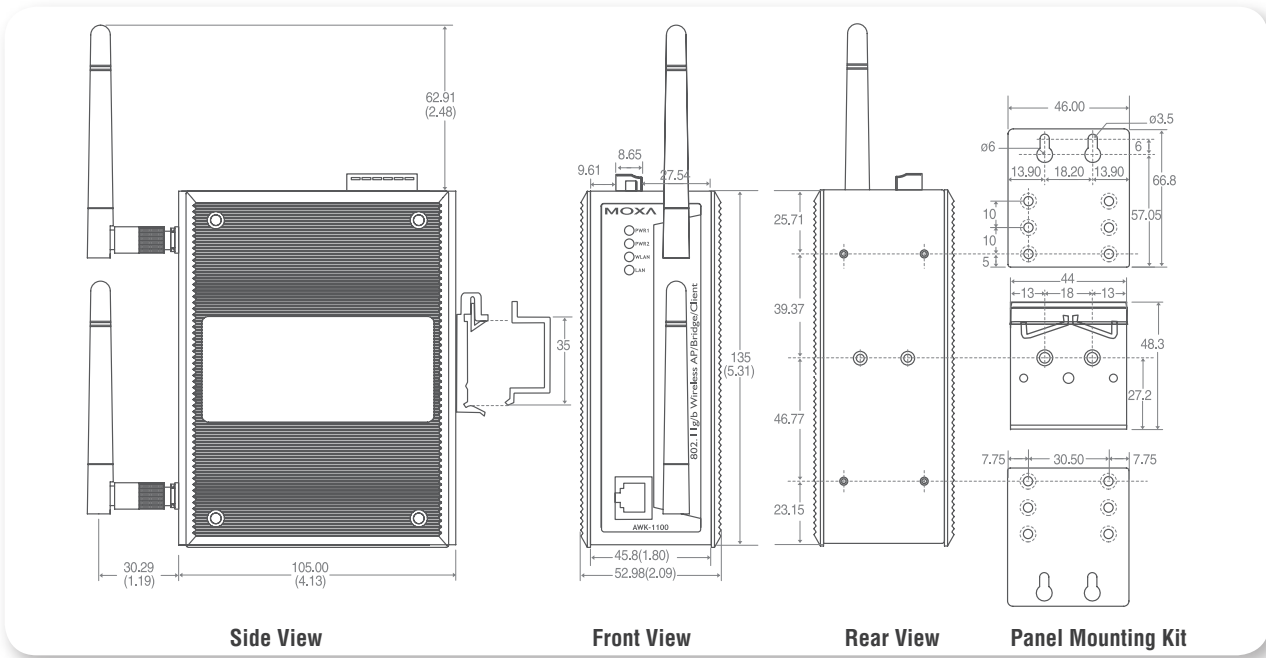
Database: MIL-HDBK-217F, GB 25°C

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

**Warranty**

5 years

**Dimensions (unit = mm)**



**Ordering Information**

**AWK-1100-US:** IEEE802.11g Wireless AP/Bridge/AP Client, 0 to 60°C, US band.

**AWK-1100-EU:** IEEE802.11g Wireless AP/Bridge/AP Client, 0 to 60°C, Euro band.

**AWK-1100-JP:** IEEE802.11g Wireless AP/Bridge/AP Client, 0 to 60°C, Japan band.

**Optional Accessories**

**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

# IEEE802.11g/b Omni & Directional Antennas

## 2.4 GHz Omni-directional Antenna

Frequency Range: 2.4-2.5 GHz	SWR (Standing Wave Ratio): 1.5:1
Antenna Type: Omni-directional	Connector: N-Female
Antenna Gain: 9 dBi	Dimensions: 390 mm (H)
Impedance: 50 Ohms	Weight: 370 g
Polarization: Vertical	Installation: U-bolt installation kit
Radiation Angle: 360° horizontal, 12° vertical	



## 2.4 GHz Directional Antenna

Frequency Range: 2.4-2.5 GHz	SWR (Standing Wave Ratio): 1.5:1
Antenna Type: Directional, Flat Panel	Connector: N-Female
Antenna Gain: 12 dBi	Dimensions: 90 x 275 x 30 mm (W x H x D)
Impedance: 50 Ohms	Weight: 500 g
Polarization: Vertical	Installation: wall mounting or swivel mounting kit (optional)
Radiation Angle: 50° horizontal, 30° vertical	



## Ordering Information

ANT-1-0-09: 2.4 GHz, omnidirectional, 9 dBi Antenna, N-Female connector

ANT-1-D-12: 2.4 GHz, directional, 12 dBi Antenna, N-Female connector

CRF-N0117SA-3M: CFD200 cable, N-Male to RP SMA Male connector, 3 meters (for AWK-1100 only)

*\*This cable is necessary for AWK-1100 to connect with optional antenna.*

### Optional Accessories

HA-1002SU: Swivel Mounting Kit, swivel angle 90° horizontal, 40° vertical

*\*Supports ANT-1-D-12 by adjusting the angle for use with different wireless applications.*