Industrial Dual 802.11ac 2.4G/5G 2T2R MIMO Wireless AP

JetWave 3220V3 Series

- Dual Radio Configurable: 802.11 a/b/g/n/ac and 2.4G/5G Band
- 802.11ac 2T2R MIMO doubles data rate up to 866Mbps per radio
- Rugged M12 ani-vibration connector for vehicle installation (3220-M12 V3)
- Support IPsec, OpenVPN
- LAN/Wireless Link Fault Pass-Through
- Dual Radio Bridge and Redundancy
- LAN/WAN/WIFI Bridging and Routing
- Korenix View, SNMP, Korenix NMS
- Controller-Based Central Management
- Industrial IP31 Aluminum Housing
- Gigabit PoE+ power input
- DC24V(12~48V) Redundant DC Power Input, DI + DO
- EN50121-4, -40~70℃ operating temp.
- JetWave 3220 V3: Dual 802.11ac 2.4G/5G 2T2R MIMO Radio with Dual Gigabit Ethernet
- JetWave 3220-M12 V3: Dual 802.11ac 2.4G/5G 2T2R MIMO Radio with Dual Gigabit Ethernet M12 Connector

Overview

The JetWave 3220 series is an industrial 802.11n/a/b/g/ac Wireless AP which offers a high performance and reliability wireless solution for both 2.4G and 5G radio band. With the JetWave 3200 series wireless access point, a network designer will easily achieve the integration of wired and wireless networks.

With the new generation 802.11ac MIMO technology, the multi-radio offers a high data rate of up to 866Mbps per radio, provide flexible wireless backbone deployment options, and provide the redundant wireless connections to increase the reliability of the entire wireless network. The JetWave 3220-M12 series equips with dual Gigabit Ethernet M12 anti-vibration connector for vehicle installation

For secure remote connectivity, JetWave 3220 V3 supports IPsec and OpenVPN. All packets transferred in VPN tunnel are encrypted and sensitive data are secured.

JetWave 3220 V3 and Korenix WLAN controller compose solution-based wireless network. All wireless networks provided by JetWave 3220 V3 APs are central managed for fast deployment, roaming performance and immediate configuration changes.

The JetWave 3220 series can function as an AP/CPE, WDS modes for different point to point or point to multiple point network applications. The additional Routing mode allows to separate the LAN and WLAN to different IP subnet, and perform NAT routing. The advanced features include LAN to WLAN Link Fault Pass-Through, Dual Radio Bridging and Redundancy, high speed gigabit Ethernet transmission, Wireless QoS (WMM) and complete wireless security and packet encryption.

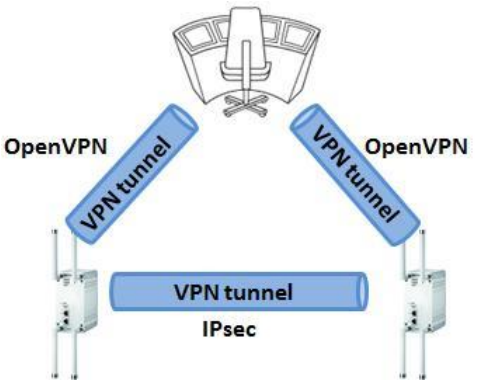
The JetWave 3220 series is an industrial grade design with the significant features of gigabit PoE+, dual 24V(12~48V)DC power input, IP31 Housing and Digital Input/Output. The design of the EN50121-4 approved and wide operation temperature design allows users to install the device under harsh environmental conditions.

Wireless Redundancy

JetWave 3220 V3 supports two Wifi interfaces that can be configured as 802.11a/g/n/ac and 2.4/5G band. By connecting the two Wifi interfaces to the same peer, the two links backup with each other. Users can assign primary link on one interface and backup link on the other.

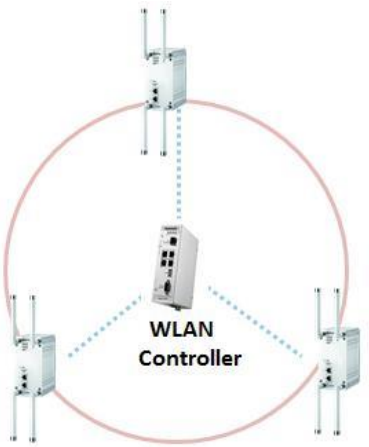
Secure Remote Connection: IPsec & OpenVPN

VPN connectivity is typical application in JetWave devices. JetWave 3220 V3 supports IPsec for point-to-point VPN tunnel and OpenVPN tunnel from filed site to control center. All packets transferred in VPN tunnel are encrypted and sensitive data are secured.

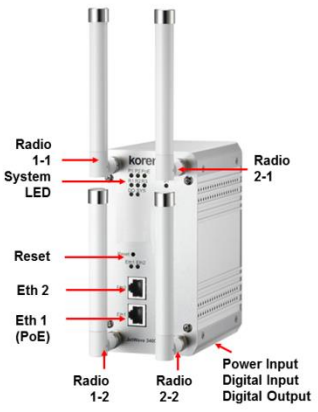


Centralized WLAN Management

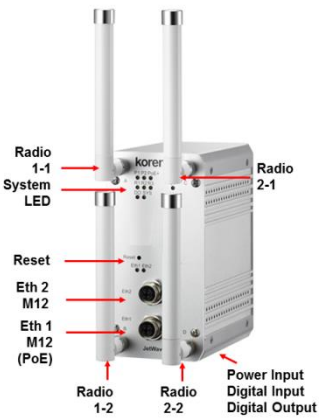
JetWave 3220 V3 and Korenix WLAN controller compose solution-based wireless network. All wireless networks provided by JetWave 3220 V3 APs are central managed by WLAN controller for fast deployment, roaming performance and immediate configuration changes.



Appearance

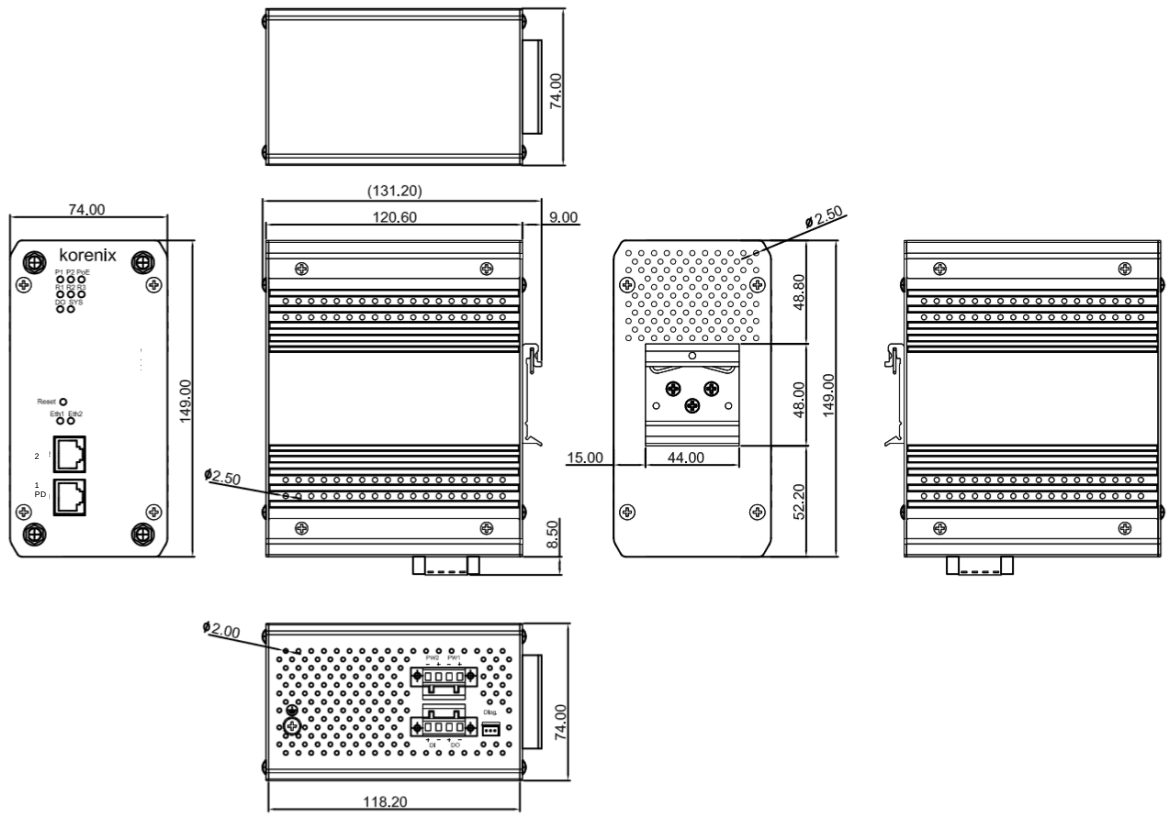


JetWave 3220 Appearance

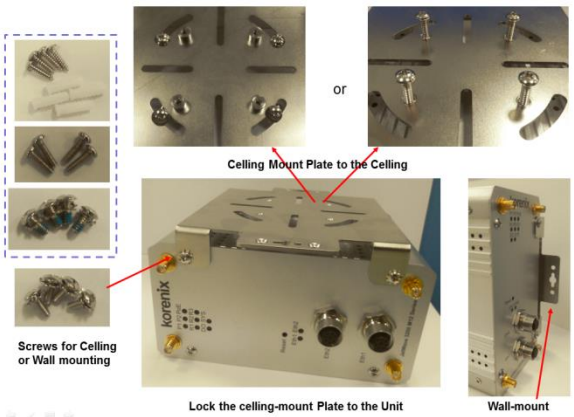


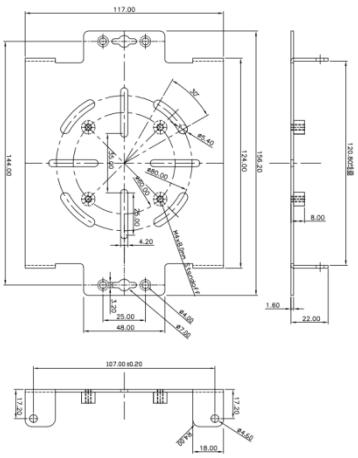
JetWave 3220-M12 Appearance

Dimension

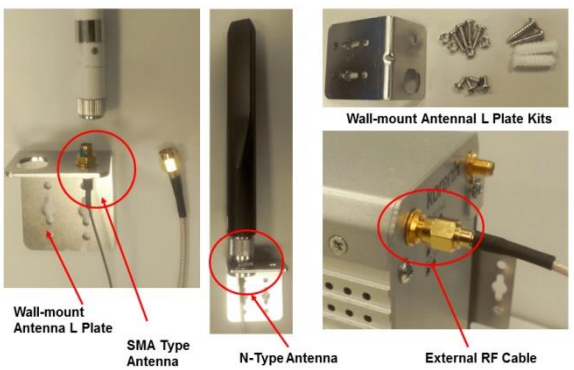


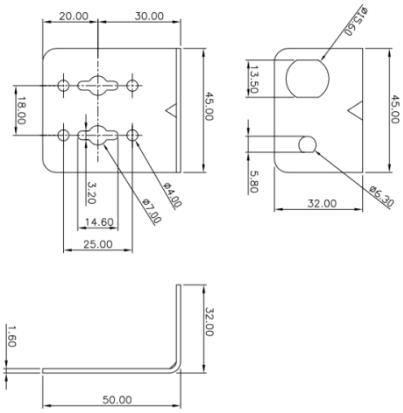
Optional Accessory - Celling Mounting Kit





Optional Accessory - Antenna Mounting Kit





Specification

Technology	
Standard	Wireless: IEEE 802.11a/b/g/n/ac for Wireless LAN IEEE 802.11i Wireless Security Ethernet: IEEE 802.3 for 10BaseT IEEE 802.3u for 10/100Base-TX IEEE 802.3ab for 1000BaseT IEEE 802.3at for Power over Ethernet plus IEEE 802.11ac Wave 1 Wireless LAN IEEE 802.1D Spanning Tree Protocol IEEE 802.1Q for VLAN Highest Data Rate: IEEE 802.11a, g: 54 Mbps IEEE 802.11n: 300Mbps @ 40MHz

Interface	
Ethernet Port	2x 10/100/1000Base-T RJ-45 (JetWave 3220 V3) 2x 10/100/1000Base-T M12 (JetWave 3220-M12 V3) IEEE 802.3at PoE+ Complaint in Ethernet Port 1
Power Input	4-pin socket for Dual DC Input
Digital Input/ Output	1x Digital Input, 0: +3V max., 1: +11V~+30VDC 1x Relay Output, 1A@24VDC
Console	3-pin Diag. socket for Diagnostic/CLI
Reset	Reset Factory Default after press 7 seconds
Antenna Socket	2x SMA Female Reverse for WIFI Radio1 2x SMA Female Reverse for WIFI Radio2 Nylok pre-applied

Performance	
CPU	Qualcomm Atheros Processor and 802.11ac WIFI Chipset
Operating Frequency	**5GHz Typical Band: (802.11n WIFI)** FCC: 5.170~5.250GHz, 5.735~5.835GHz CE: 5.170~5.250GHz (Programmable for other 5G Band) **2.4GHz Band: (802.11n WIFI)** FCC : 2.412~2.462GHz CE : 2.412~2.472GHz (Programmable for different country regulations)
RF Modulation	802.11a/n: OFDM (BPSK, QPSK, 16-QAM, 64QAM) 802.11g/n: OFDM (BPSK,QPSK,16-QAM,64QAM)
RF Output Power (Max. of Avg.)	**5.8GHz Band:** 19dBm@ 802.11a/n HT20 (MCS0/8, 5180MHz) for FCC 23dB EIRP for ETSI 301 893 (Band 1) 25dB EIRP for ETSI 301 893 (Band 4) **2.4GHz Band:** 21dBm at 802.11g/n HT40 (MCS0/8, 2422MHz) for FCC 20dB EIRP for CE (ETSI 300 328) (Controllable for different country regulations)
Sensitivity	**5 GHz Band:** **802.11a:** -90dBm@6Mbps,1Rx; -75dBm@54Mbps,1Rx **802.11n HT20:** -90dBm@MCS0,1Rx; -71dBm@MCS7,1Rx **802.11n HT40:** -87dBm@MCS0,1Rx; -70dBm@MCS7,1Rx **2.4 GHz Band:** **802.11b:** -94dBm@1Mbps,1Rx; -90dBm@11Mbps,1Rx **802.11g:** -92dBm@6Mbps,1Rx; -75dBm@54Mbps,1Rx **802.11n HT20:** -91dBm@MCS0,1Rx; -72dBm@MCS7,1Rx **802.11n HT40:** -88dBm@MCS0,1Rx; -70dBm@MCS7,1Rx

Power Requirements	
Power	Ethernet 1: IEEE802.3at PoE+ compliant Cables: 2/4-pair UTP/STP Cat. 5E cable (100m) DC Input: Dual 24V (12~48VDC) input
Power Consumption	Max. 10 Watts @ DC 48V, depend on Radio TX power

Default WIFI Antenna Characteristics	
Gain	Default Antenna 5G 3.57dBi, 2.4G 2.63dBi,
Frequency	Available for 5G/2.4G band
Direction	Omni-Antenna
Material	Fiberglass

Management	
Management	Web GUI, Korenix View Utility, SNMP, NTP, IP Setup, DHCP Server/Client, Management VLAN, Configuration Backup/Restore, Reload Default
Operating Mode	System: Bridge or Router Wireless: Wireless Access Point, Wireless Client WDS-AP, WDS-Client Redundant AP, Redundant Client for wireless redundancy
Central Management	Standalone/ Controller-Based Mode
Radio	Radio Bandwidth Control, Output power, Antenna number
WLAN Setup	Multiple SSID, Radio On/Off, SSID Broadcast, Frequency/Channel Select, Data Rate, VLAN ID, Advanced Settings, Maximum Client number
Link Integration	Wire and Wireless Link Fault Pass-Through
WMM	WMM QoS
Traffic Shaping	Downstream/ Upstream Traffic Limit
Router	Static, DHCP, LAN/WAN IP, IP/Port Filtering
STP	Support Spanning Tree Protocol
SNMP	Simple Network Management Protocol v1/v2c/v3, Function-based MIB
MIB	Function-based Management Information Base for SNMP Management
Status	Wireless Status, Associated client, Ping, Site Survey, Ping Watchdog
Link Test	Antenna Alignment Tool Data Rate Test
SNMP Trap	SNMP Trap to specific server
SMTP	E-mail Alert
System Log	System events log

Security	
Security	Multi-SSID (up to 8x ESSID for each radio)
Secured Access	HTTPS, SSH, IEEE 802.1X, MAC Address ACL
Firewall	Inbound/outbound firewall for IP/MAC filtering DMZ, Port forwarding
VPN	IPsec, OpenVPN
Security Encryption	WEP 64/128 bits, WPA-PSK(TKIP), WPA2-PSK/EAP (IEEE 802.1x/RADIUS, TKIP and AES)

Mechanical	
Enclosure	IP31 protection
Antenna connector	Reverse SMA
Mounting	Din-Rail, Wall-Mount, Celling-Mount (Option Accessory)
Dimension	149 mm(H) x 120.6 mm(D) x 74 mm(W)
Weight	1.5 kg with package, without optional accessary

Environmental	
Operating	Temperature: -40 ~70°C Humidity: 5% ~ 95% (operating)
Storage	Temperature: -40 ~ 85°C

Approvals	
Certification	CE RED CE EN55022/55024 EN 301 489-1/17 EN 301 893 V1.7.1 EN 300 328 V1.8.1 Safety EN60950-1 FCC Part 15B Class A Railway
Warranty	5 years

Option Accessory	
Celling Mounting	Celling Mounting Plate, Used for Celling-/Wall-mounting, Dimension: 156x117x22mm
External Antenna Mounting Kit	Antenna Mounting L Plate Extended Radio Cable: RG316 Cable, L=90cm, SMA Male Reverse to SMA Female Reverse

Ordering Information	
JetWave 3220 V3	Industrial Dual 802.11ac 2.4G/5G 2T2R MIMO Wireless AP
JetWave 3220-M12 V3	Industrial Dual 802.11ac 2.4G/5G 2T2R MIMO Wireless AP, 2x Gigabit Ethernet M12 Connectors
Includes:	JetWave 3220 V3/3220-M12 V2 4x Default Antenna Din-Rail ,Power/DI+DO connector Quick Installation Guide

Optional Accessory	
JetWave 3400/3300/3200 Series External SMA Antenna Mounting Kit	4x Antenna Mounting L Plate 4x 90cm RG 316 Extended SMA Type Radio Cable 1x Celling-Mounting Plat

Power Source Equipment (PSE)	
Gigabit Managed PoE+ Switch:	**JetNet 5310G** Industrial 8 PoE + 2 Gigabit Combo Managed High Power IEEE802.3at PoE Switch, -40~75°C
Gigabit 24V Booster PoE+ Switch	**JetNet 3906G** Industrial 6-port Gigabit IEEE802.3af/at PoE Switch **JetNet 3810Gf** Industrial 8 FE PoE + 2 GbE SFP Booster PoE Switch **JetNet 3810G** Industrial 8 FE PoE + 2 GbE Booster PoE Switch
Gigabit PoE+ Injector	**JetCon 1702-A** Industrial 2-Port High Power PoE Injector, A-Mode, -40~75°C **JetCon 1702-B** Industrial 2-Port High Power PoE Injector, B-Mode, -40~75°C