



## Main Features

- Tunneled AP Management incorporating with NEXCOM IWF controller
- Multiple virtual APs for grouping policy/management
- WDS and WES for extending wireless coverage
- Dual RF for IEEE 802.11b/g/n+802.11a/n, MIMO 2\*300Mbps high throughput
- Dual power input: 802.3at PoE and 12VDC input
- Supporting QoS & 802.11e WMM
- Industrial-grade operating temperature -5~60°C
- High power RF solution @ 24dBm (peak)

## Product Overview

Targeting on light duty industrial & enterprise application, IWF 2220 is designed to be operating at 0~+60°C with dual radio running with one 802.11b/g/n and one 802.11a/n (5GHz) to deliver up to 2\*300Mbps throughput. The RF performance has been enhanced by PA and LNA for 4 times coverage than normal SoC chipset.

IWF 2220 supports tunnel based AP management, and comes with all standards demanded by enterprise applications, including business grade security (802.1X, WPA and WPA2), and multiple ESSIDs with VLAN tags to separate the traffic of different departments. Embedded with 802.11n/a + 802.11b/g dual-band 2x2 MIMO radios, the high speed (up to 300Mbps per radio) IWF 2220 is designed for wireless connectivity services. The well designed 24dbm high RF power, LNA (Low Noise Amplifier) and high gain antenna provides 4 times coverage than ordinary AP. The dual power input of PoE 802.3af & DC 12V ensures power connected all the time.

The light industrial environments include assembly line, warehouse, and staff office can adopt IWF2220 for Wi-Fi services and share the same central management functions from NEXCOM IWF WLAN controller.

## Specifications

### Wireless Radio

- Wireless Interface: IEEE 802.11b/g/n + 802.11a/n Radios operating in 2.4 GHz and 5 GHz frequencies
- Wireless architecture:
  - (1) AP mode
  - (2) WDS mode (Repeater/ Bridge)
- Modulation:
  - (1) OFDM (64-QAM, 16-QAM, QPSK, BPSK)
  - (2) DSSS (CCK, DBPSK, DQPSK)
- Channels:
  - (1) USA: 1~11, 36, 40, 44, 48, 52~64, 100~136, 149~161
  - (2) Japan: 1~13, 36, 40, 44, 48, 52~64, 100~136
  - (3) Europe: 1~13, 36, 40, 44, 48, 52~64, 100~136
- Data rate with auto fallback:
  - (1) 802.11a: 6~54 Mbps
  - (2) 802.11b: 1~11 Mbps
  - (3) 802.11g: 6~54 Mbps
  - (4) 802.11n: 6.5~300Mbps
- Transmit Power:
  - (1) 802.11a: 21dBm@54Mbps ±2dB
  - (2) 802.11b: 24dBm@11Mbps ±2dB
  - (3) 802.11g: 21dBm@54Mbps ±2dB
  - (4) 802.11n 5G HT20 & HT40: 20dBm@MCS7 ±2dB
  - (5) 802.11n 2.4G HT20 & HT40: 21dBm@MCS7 ±2dB
- Receiver Sensitivity:
  - (1) 802.11a: -70dBm@54Mbps ±2dB
  - (2) 802.11b: -85dBm@11Mbps ±2dB
  - (3) 802.11g: -70dBm@54Mbps ±2dB
  - (4) 802.11n 5G HT20: -65dBm@MCS7
  - (5) 802.11n 5G HT40: -62dBm@MCS7
  - (6) 802.11n 2.4G HT20: -65dBm@MCS7
  - (7) 802.11n 2.4G HT40: -62dBm@MCS7
- Detachable Antenna: 4x dual-band (2.4GHz & 5GHz) 2 x 2 MIMO in SMA Connector

### QoS-WMM

- DiffServ/ TOS
- IEEE 802.1p/ COS
- IEEE 802.1Q Tag VLAN priority control
- IEEE 802.11e WMM

### Handover & Roaming

- IEEE 802.11i pre-auth (PMKSA cache)

### Security

- WEP (64/128/152 bits)
- EAP-TLS + Dynamic WEP
- EAP-TTLS + Dynamic WEP
- PEAP/MS-PEAP + Dynamic WEP
- WPA (PSK + TKIP)
- WPA (802.1X certification + TKIP)
- 802.11i WPA2 (PSK + CCMP/AES)
- 802.11i WPA2 (802.1X certification + CCMP/AES)
- Setting for TKIP/ CCMP/AES key's refreshing period
- Hidden ESSID support
- MAC Address filtering (MAC ACL)
- MAC authentication with RADIUS servers
- Maximum number of registered RADIUS servers: 2

### System Management

- Web-based administration
- SNMP v1/v2c
- Provides Event Log
- SYSLOG information support
- Statistics
- Configuration backup and restore
- Factory default setting restore
- Firmware upgrade
- Capable of performing RADIUS Accounting and Accounting Update
- WES (Press-n-Connect) button for WDS Easy Setup
- Support Tunneled AP Management with secure WLAN controllers
- Support CAPWAP AP management
- Support IPv6
- Ethernet LAN Port Mapping (with a 4ipnet controller)
- IGMP Snooping
- Proxy ARP

### Built-in Servers & Client Interfaces to Other Services

- DHCP client
- DNS client
- SYSLOG client
- RADIUS client
- SNMP v1/ v2c client

### Wireless Signal Management

- Number of ESSIDs (Virtual APs): 2x 8
- Number of associated clients: 2x 128
- Setting for maximum number of associated clients
- Network policy based on ESSID

### Hardware Specification

- Uplink Port: 1x 10/100/1000 Base-T Ethernet with IEEE802.3at PoE (as PD)
- LAN Port: 4x 1x 10/100/1000 Base-T Ethernet
- Antenna: 4x RP-SMA foldable antenna
- Antenna gain: 3/5dBi @2.4/5GHz

### Physical and Power

- Support IEEE 802.3at PD
- Form factor: wall mount
- Dimension (WxDxH): 213 x 125 x 37.4mm (not include antenna)
- Weight: 828g (AP include wall mount, not include antenna nor adapter)
- PoE input: 802.3at
- DC Jack: +12V/2A

### Environmental Specification

- Humidity 95% @ 60°C (non-condensing)
- Operating Temperature 0~+60°C
- Storage Temperature: -20~80°C
- Vibration: Random 0.3g

### Certifications

- FCC, CE
- RoHS compliant

### Package Contents

- IWF 2220 x1
- CD-ROM (with User's Manual and QIG) x1
- Detachable antenna x4
- Ethernet cable x1

## Ordering Information

- **IWF 2220-EU (P/N: 10T00222000X0)**
- **IWF 2220-US (P/N: 10T00222002X0)**