



## Main Features

- Single Radios and compliant with IEEE 802.11a/b/g/n 2x2 MIMO
- Fast roaming (hand-over switch time less than 20 ms)
- Installation Utilities: antenna alignment, distance calculation and site survey tools
- Compliant with IEEE 802.11a/b/g/n 2x2 MIMO
- 300 Mbps data rate
- 2 x 12 ~ 48VDC redundant power
- IEEE 802.3at Power over Ethernet
- Gigabit Ethernet RJ45
- WEP, WPA, WPA2-PSK/EAP (IEEE 802.1X/RADIUS, TKIP and AES)
- Operating temperature range from -40 to 80°C
- FCC/CE certification
- EN50155 compliant

## Product Overview

The IWF 3310X series are enterprise and carrier-grade 802.11n Industrial Wireless Access Point which offers customer a robust and high performing solution for PTP/PTMP/Hotzone applications in both license-free 2.4GHz and 5GHz bands.

The IWF 3310X series are the most ideal candidate for Service Providers looking to deliver carrier-grade wireless services to multiple market segments such as Railway train, Bus, MRT fast roaming, campuses Mesh network, hospitality, healthcare, warehousing and wider metropolitan area deployments.

### IWF 3310X series Category

Model	Radio Spec.
IWF3310XH	Hopping AP/CPE, IEEE 802.11 a/b/g/n Dual-Band 2x2 MIMO
IWF3310XM	Mesh/Mobility AP/CPE, IEEE 802.11 a/b/g/n Dual-Band 2x2 MIMO

## Specifications

### Wireless Radio

- Single 2 x 2 MIMO radio

### Frequency Ranges

- USA: 2.400 ~ 2.483 GHz, 5.15 ~ 5.35 GHz, 5.725 ~ 5.825 GHz
- Europe: 2.400 ~ 2.483 GHz, 5.15 ~ 5.35 GHz, 5.47 ~ 5.725 GHz
- Japan: 2.400 ~ 2.497 GHz, 5.15 ~ 5.35 GHz, 5.47 ~ 5.725 GHz
- China: 2.400 ~ 2.483 GHz, 5.725 ~ 5.85 GHz

### RF output power : (± 2dBm)

- IEEE 802.11a
  - 21dBm@6M
  - 16dBm@54M
- IEEE 802.11b
  - 21dBm@1M
  - 19dBm@11M
- IEEE 802.11g
  - 23dBm@6M
  - 19dBm@54M
- IEEE 802.11a/n HT20/40
  - 19dBm@MCS0/8

- 14dBm@MCS7/15
- IEEE 802.11g/n HT20
  - 21dBm@MCS0/8
  - 17dBm@MCS7/15

### Receive Sensitivity

- IEEE 802.11a
  - -91dBm@6M
  - -75dBm@54M
- IEEE 802.11b
  - -91dBm@1M
  - -87dBm@11M
- IEEE 802.11g
  - -91dBm@6M
  - -76dBm@54M
- IEEE 802.11a/n HT20/40
  - -95/-91dBm@MCS0/8
  - -77/-73dBm@MCS7/15
- IEEE 802.11g/n HT20/40
  - -95/-91dBm@MCS0/8
  - -79/-75dBm@MCS7/15

**Ethernet**

- 10/100/1000 Base-TX MDI/MDI-X RJ-45 x 1
- Compliant with:
  - IEEE 802.3/802.3u
  - Hardware based 10/100/1000, full/half, flow control auto negotiation

**Bridge Mode**

- Layer 2 Switching Learning Technology
- Spanning Tree Protocol -IEEE 802.1d STP/IEEE 802.1w RSTP
- Store-and-Forward
- Static IP
- DHCP server
- IEEE 802.1q Tag VLAN
- IEEE 802.1p VLAN Priority Based QoS

**Router Mode**

- DHCP Server
- RIP
- IP Filter
- Port Filter
- Port Forward
- DMZ Support
- Static Route

**Security**

- Hide SSID
- MAC filtering ACL
- WEP 64/128/152 bits
- IEEE 802.1 x EAP-TLS/EAP-TTLS/MSCHAPv2/GTC
- WPA/WPA2 PSK/EAP with TKIP/CCMP AES based Encryption

**Management**

- HTTP(s) Web GUI
- Telnet
- SSH
- CLI commands
- SNMP v2c and V3 standard (Private MIB)
- Syslog
- Layer management Utility
- Management VLAN Tag
- NTP client
- Firmware upgrade
- Configuration Backup and Restore
- Factory default configuration

**Utility**

- Ping test
- RSSI and Path loss Calculation
- Wireless Site survey
- Antenna Alignment Tool
- System Status
- Link Information

**Advanced Technology**

- Multiple Hopping (up to 10 hops with more than 100Mbps throughput)
- Wireless Bandwidth Limitation
- Support MESH/Mobility function in IWF 6330M

**Physical and Power**

- Support 48Vdc Power over Ethernet
- Form Factor: DIN-rail and Wall-mount
- Dimension: 58.8 x 139.6 x 167 mm
- Weight: 1.73kg
- IP30 rated

**Environment Protection**

- Operating temperature: -40°C to 80°C
- Storage temperature: -40°C to 80°C
- Humidity: 0% to 95% maximum (Non-condensing)
- Vibration: Random 0.3g

**Certification**

- FCC
- CE
- RoHS compliant

**Package Contents**

- IWF 3310X unit x 1
- Terminal block x 1
- Detachable Dual-Band Antenna x 2 4/5dBi (2.4/5GHz)
- Ethernet Cable x 1
- Wall mount kit x 1

**Ordering Information**

- **IWF 3310XH-US (P/N: 10T00331001X0)**
- **IWF 3310XH-EU (P/N: 10T00331000X0)**
- **IWF 3310XM-US (P/N: 10T00331003X0)**
- **IWF 3310XM-EU (P/N: 10T00331002X0)**