



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

* Note: The available frequency range may be different according to different certification.

RF output power: (\pm 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-bit
- ♦ 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)**

* Note: The available RF output power will be given by certified power in different regions.