

# IWF 6330H/6330M

Industrial IP67 Outdoor Hopping/Mesh/Mobility Access Point

Triple RF, Dual Band, 802.11 a/b/g/n



## Main Features

- Triple Radios and compliant with IEEE 802.11a/b/g/n 2x2 MIMO
- Fast roaming (hand-over switch time less than 20 ms)
- Smart installation utilities: Distance calculation, Antenna alignment and site survey tools
- 48VDC PoE input
- Gigabit Ethernet Waterproof RJ45
- WEP, WPA, WPA2-PSK/EAP (IEEE 802.1X/RADIUS, TKIP and AES)
- Operating temperature range from -35 to 75°C

## Product Overview

The IWF 6330 series are enterprise and carrier-grade 802.11n Triple Radios Outdoor Wireless Access Point which offers customer a robust and high performing solution for PTP/PTMP/Hotzone/Hopping/Mesh/Mobility Wi-Fi applications in both license-free 2.4GHz and 5GHz bands.

The IWF 6330 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.

Designed to meet customer needs in a broad range of industries, the IWF 6330 offers the following benefits:

### Flexible wireless backbone deployment options

Multiple radio interfaces were integrated by NEXCOM core data switching technology inside the IWF6330 series. Each radio interface can be configured independently to meet different wireless connectivity purposes. With the fast data switching between multiple radio interfaces, the backbone throughput will remain in a high level even after several relays between APs.

### High-performance wireless backbone

With the next generation 802.11n MIMO technology, the IWF6330 offer data link rate up to 300Mbps in each single radio interface. Short Guard Interval and Frames Aggregation methodology configurations improve the efficient of backbone usage.

### IWF 6330 Series Category

Model	Radio Spec.
IWF 6330H	Hopping AP, Triple Radios, IEEE 802.11 a/b/g/n Dual-Band 2 x 2 MIMO, High Power
IWF 6330M	Mesh/Mobility AP, Triple Radios, IEEE 802.11 a/b/g/n Dual-Band 2 x 2 MIMO, High Power

## Specifications

### Wireless Radio

- Three 2 x 2 MIMO radios

### 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)

- IEEE802.11a
  - 24dBm@6M (all)

- 21dBm@54M (all)
- IEEE802.11b
  - 24dBm@1M (all)
  - 24dBm@11M (all)
- IEEE802.11g
  - 25dBm@6M (all)
  - 22dBm@54M (all)
- IEEE802.11a/n HT20
  - 24dBm@MCS0/8 (all)
  - 18dBm@MCS7/15 (5180MHz)
  - 17dBm@MCS7/15 (5825MHz)

- IEEE802.11a/n HT40
  - 22dBm@MCS0/8 (all)
  - 17dBm@MCS7/15 (5190MHz)
  - 16dBm@MCS7/15(5795MHz)
- IEEE802.11g/n HT20
  - 25dBm@MCS0/8 (all)
  - 21dBm@MCS7/15 (all)
- IEEE802.11g/n HT40
  - 24dBm@MCS0/8 (all)
  - 20dBm@MCS7/15 (all)

#### Receive Sensitivity

- IEEE802.11a
  - -82dBm@6M, 1Rx
  - -95/-91dBm@6M, 2Rx
  - -65dBm@54M, 1Rx
  - -79/-75dBm@54M, 2Rx
- IEEE802.11b
  - -82dBm@1M, 1Rx
  - -92/-88dBm@1M, 2Rx
  - -76dBm@11M, 1Rx
  - -92/-88dBm@11M, 2Rx
- IEEE802.11g
  - -82dBm@6M, 1Rx
  - -95/-91dBm@6M, 2Rx
  - -65dBm@54M, 1Rx
  - -80/-76dBm@54M, 2Rx
- IEEE802.11a/n HT20
  - -82dBm@MCS0, 1Rx
  - -95/-91dBm@MCS0, 2Rx
  - -64dBm@MCS7, 1Rx
  - -77/-73dBm@MCS7, 2Rx
- IEEE802.11a/n HT40
  - -79dBm@MCS0, 1Rx
  - -91/-87dBm@MCS0, 2Rx
  - -61dBm@MCS7, 1Rx
  - -73/-69dBm@MCS7, 2Rx
- IEEE802.11g/n HT20
  - -82dBm@MCS0, 1Rx
  - -95/-91dBm@MCS0, 2Rx
  - -64dBm@MCS7, 1Rx
  - -77/-73dBm@MCS7, 2Rx
- IEEE802.11g/n HT40
  - -79dBm@MCS0, 1Rx
  - -92/-88dBm@MCS0, 2Rx
  - -61dBm@MCS7, 1Rx
  - -74/-70dBm@MCS7, 2Rx

#### Ethernet

- 10/100/1000 Base-TX MDI/MDIX RJ-45 x 1
- Compliant with :
  - IEEE802.3 / 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 802.1x 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: Pole/Wall mountable
- Dimension: 220 x 220 x 77 mm
- Weight: 2.0kg (3.7kg mount kit included)
- Outdoor IP67 rated

#### Environment Protection

- Operating temperature: -35°C to 75°C
- Storage temperature: -35°C to 75°C
- Humidity: 0% to 95% maximum (Non-condensing)
- Vibration: Random 0.3g

#### Certification

- FCC
- CE
- RoHS compliant

#### Package Contents

- IWF 6330H(M) unit x1
- 48Vdc power adaptor x1
- PoE injector x1
- Pole/Wall mount kit x1

## Ordering Information

- IWF 6330H-US (P/N: 10T00633003X0)
- IWF 6330H-EU (P/N: 10T00633002X0)
- IWF 6330M-US (P/N: 10T00633001X0)
- IWF 6330M-EU (P/N: 10T00633002X0)

#### Wireless Accessories

- Outdoor omni-directional antenna 2.4~2.5GHz 8dBi (P/N: 603ANT0008X00)
- Outdoor directional antenna 5.1-5.9GHz 15dBi (P/N: 603ANT0013X00)
- ARRESTER DC-6 GHz N-MALE TO N-FEMALE (P/N: 7A00000066X00)
- Low Loss Cable, LC-CFD400L1, Length = 1M (P/N: 6023300106X00)