



Main Features

- Multiple operation mode (Mesh/AP/Client mode) meets diversified deployment
- Heavy industrial grade with Level-4 EMC immunity to Surge, ESD and EFT plus -40~75°C operation temperature
- Dual band, dual high power radios
- Multiple VAPs in each Wi-Fi radio: Mesh and AP can exist in the same radio (up to 8 x VAP for each radio)
- Up to 27 dBm high RF power for longer communication range
- High throughput performance ideally for video surveillance and data transmission simultaneously
- Dual power redundancy (DC and PoE)
- Wireless security: WEP, WAP/WPA2, WPA2-personal, WPA2-Enterprise, Hidden ESSID, MAC address filtering
- Easy configuration and management EMWatch software
- IP67 certified

Product Overview

EMBUX IWF 610 is a dual band, dual concurrent Wi-Fi Mesh AP which supports Mesh, AP and Client modes. This is dedicated design for heavy industrial environment. With the Wi-Fi Mesh technology, IWF 610 provides most reliable wireless connectivity with intelligent multi-path mechanism. It establishes robust access and backbone infrastructure. To meet the requirement of critical environment, IWF 610 equips with wide temperature (-40~75°C), IP67 protection, highest standard level-4 EMC immunity capability.

For security consideration, IWF 610 gives user versatile selection of different encryption (pre-shared key and Enterprise) black list and white list protection mechanism. Together with nCare, I4.0 network manager, IWF 610 can be easily managed. Thus, effectively reduce the cost for network maintenance and management effort.

Specifications

Wireless Radio

- IEEE802.11a/b/g/n, MIMO 2 x 2

Wi-Fi Frequency Ranges

- 2.4 GHz
 - 2.412-2.472 GHz
- 5 GHz
 - USA: 5.15~5.25 GHz, 5.725~5.825 GHz
 - Europe: 5.15~5.35 GHz, 5.47~5.725 GHz

RF Output Power

- 802.11a
 - 6Mbps: 27 dBm
 - 54Mbps: 24 dBm
- 802.11g
 - 6Mbps: 27 dBm
 - 54Mbps: 24 dBm
- 802.11 an/gn
 - MCS0: 27 dBm
 - MCS7: 24 dBm

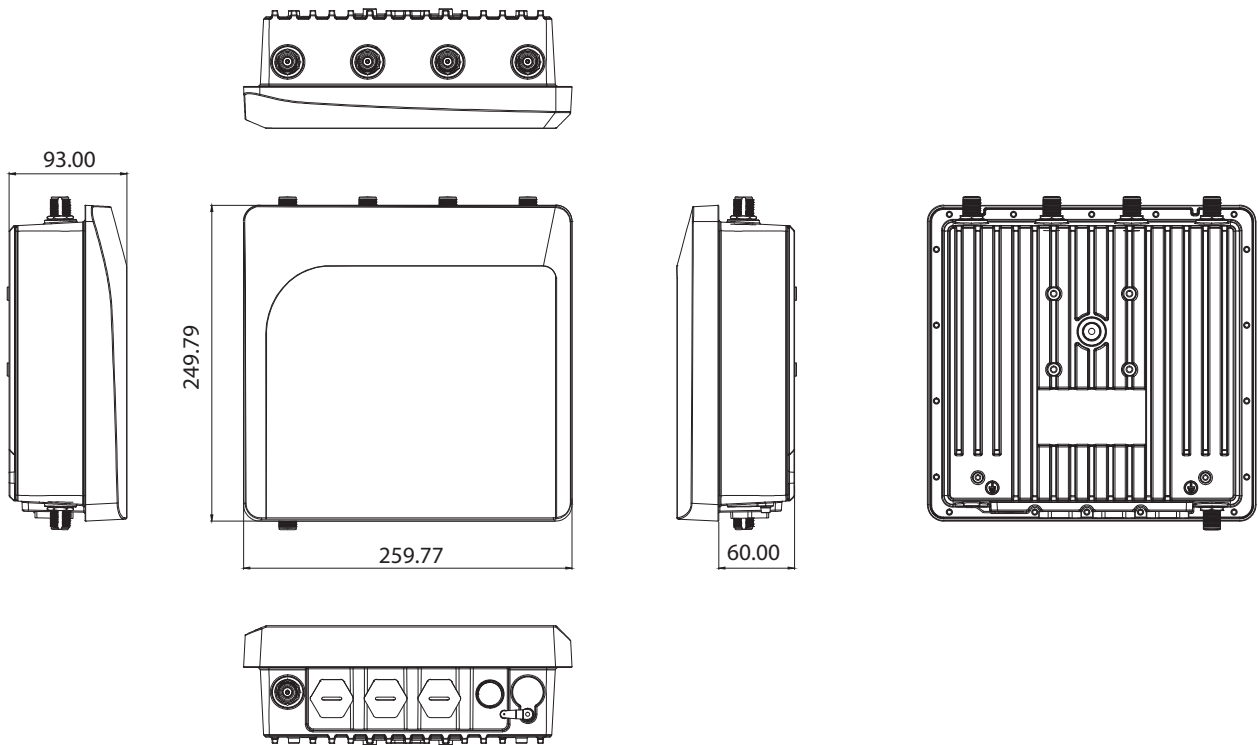
Hardware

- WAN: 10/100/1000 Base-TX MDI/MDIX
- LAN: 10/100/1000 Base-TX MDI/MDIX
- Compliant with:
 - IEEE802.3/802.3u
 - Hardware based 10/100/1000, full/half, flow control auto negotiation
- Push buttons:
 - 1 x reset/restore to default
- LED:
 - 2 X Ethernet
 - 2 X 11an Radio
 - 1 X Power/Status
- Antenna port:
 - 4 X N-type connector

Compliance

- IEC 60950, 2nd Edition
- EN 60950, 2nd Edition
- IEC 61000-4-2 Level 4 ESD Immunity
- IEC 61000-4-4 Level 4 Electrical Fast Transient Burst Immunity
- IEC 61000-4-5 Level 4 Surge Immunity

Dimension Drawing



Wi-Fi Security

- Open
- WEP
- WAP/WPA2 Mixed
- WPA2-personal (PSK+CCMP/AES)
- WPA EAP
- WPA2 EAP
- Hidden ESSID support
- MAC address filtering (MAC ACL)
- Station isolation

System Management

- Web-based GUI
- SNMP V1/V2c/V3
- Event log
- SYSLOG
- Configuration backup and restore
- Restore factory default setting
- Remote firmware upgrade
- EmWatch configuration support
- nCare network management (2nd phase)

Physical and Power

- 12~48 VDC
- PoE (Standard PoE 802.3at)
- Wall/VESA/Pole mountable (Pole mount kit is an optional accessory)
- Dimension: 250mm x 260mm x 93mm
- Weight: 2.5Kg

Environment Protection

- IP67 water & dust proof
- Operating temperature: -40~75°C (altitude : up to 3000m)
- Storage temperature: -40~85°C
- Humidity: 0% to 95% maximum (Non-condensing)
- Vibration: random 0.3g

Certification

- Radio approvals
 - FCC Part 15.247, 15.407
 - EN 300 328
 - EN 301 893
- EMC
 - FCC part 15.107, 15.109
 - EN 301 489-1, -17

Optional Accessories

- **P/N: 10T00061000X0**
IWF610 IP67 Industrial mesh access point