



ATEX model



CID2 model

Main Features

- Anti-explosive Wi-Fi Mesh backbone for HazLoc environment.
- 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 power redundancy (DC and PoE)
- High throughput performance ideally for video surveillance and data transmission simultaneously.
- Hybrid Wi-Fi Mesh + AP for backbone and access concurrently
- Easy management with nCare support

Product Overview

NEXCOM's NIO 200WMR is a unique anti-explosive (CID2 & ATEX certified) Wi-Fi routers which support Mesh, AP and Client modes. This is dedicated design for heavy industrial HazLoc environment. With the Wi-Fi Mesh technology, NIO 200WMR provides most reliable wireless connectivity with intelligent multi-path mechanism. It establishes robust access and backbone infrastructure. To meet the requirement of critical environment, NIO 200WMR equips with wide temperature (-40~75°C), IP67 protection, highest standard level-4 EMC immunity, CID2 and ATEX anti-explosive capability.

For security consideration, NIO 200WMR 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, NIO 200WMR can be easily managed. Thus, effectively reduce the cost for network maintenance and management effort.

Specifications

Wireless Radio

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

Wi-Fi Frequency Ranges

- 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: IEEE 802.11a

- 802.11a
 - 27 dBm with 2 antennas
- 802.11n (HT20)
 - 27 dBm with 2 antennas
- 802.11n (HT40)
 - 27 dBm with 2 antennas

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 IWSN radio
 - 1 x Power/Status

N-Type:

- 5 x N-type connector

* Note: IWSN feature is not supported in NIO 200WMR model

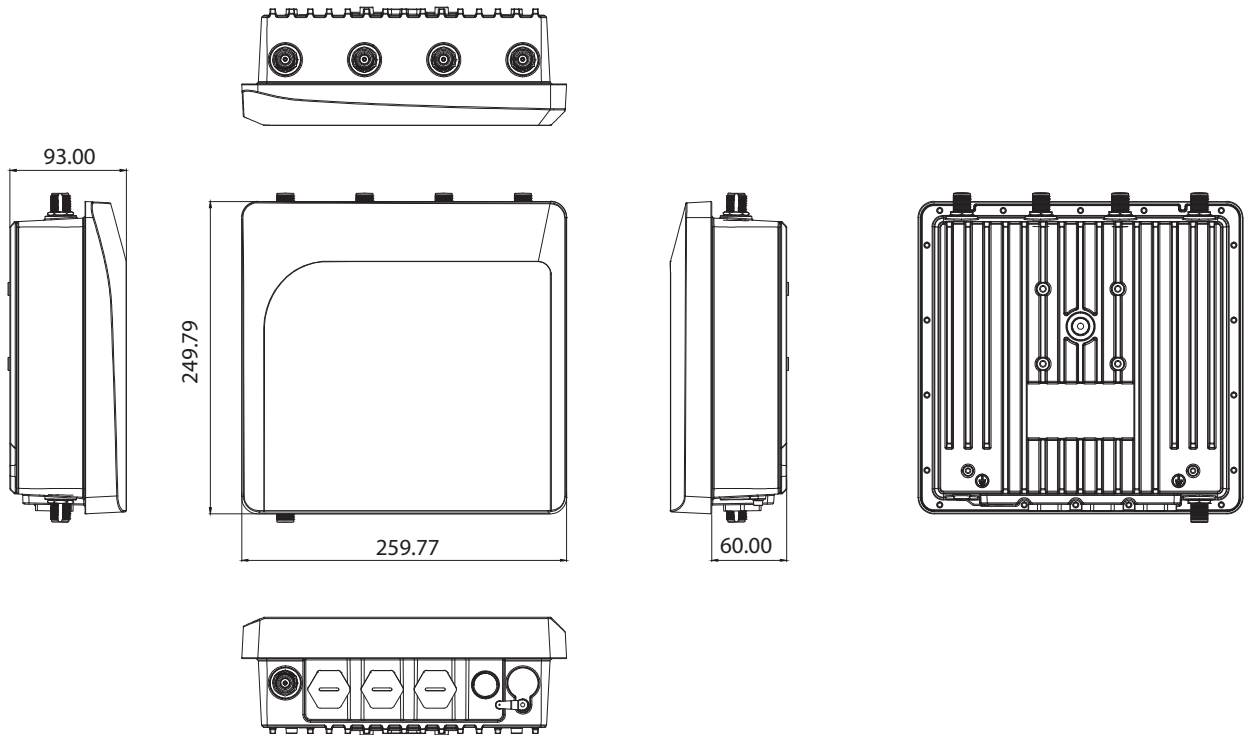
Compliance

- 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

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

Dimension Drawing



System Management

- Web-based GUI
- SNMP V1/V2c/V3
- nCare network management
- Event log
- SYSLOG
- Configuration backup and restore
- Restore factory default setting
- Remote firmware upgrade

High-Side Communication Interfaces

- Monitoring and Control System (MCS)
- Modbus/CP
- Gateway Services Access Point (GSAP) (only for NIO 200IAG/IDG)
- HART-IP (only for NIO 200HAG)

Built-in Servers & Client Interfaces to Other Services

- SNMP v1/v2c/v3 client
 - 1 X IWSN Radio
 - 1 X Power/Status
- N-Type: 5X N-type connector
 - * Note: IWSN feature is not supported in NIO200WMR model

Physical and Power

- 12~48 VDC
- PoE (standard PoE 802.3at)
- Wall/VESA/Pole mountable (pole mount kit is an optional accessory)
- Dimension: 256mm x 226mm x 91mm
- Weight: 2.5Kg

Environment Protection

- 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

- UL 60950-1; 60950-22, 2nd Edition
- 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

Anti-explosive certification

- CID2: Groups A, B, C, D, T4
- ATEX: Class I, Zone 2; Ex nA IIC, T4

Ordering information

- NIO 200WMR-US NIO200 Wi-Fi Mesh Router
(P/N: 10T00020013X0)