



“WIRELESS SOLUTION”

New Energy Fields & Communication Management Solution
Wireless Surveillance Solution
Hybrid workplace solution for SMB
Rural Wireless Solution

BROCHURE

Z-COM, Smart and Fast Network Communication

New Energy Fields & Communication Management Solution

Z-COM SP250-A04與zMEC 搭配，為台電DNP3.0合格廠商

It works in conjunction with zMEC for DNP3.0 protocol

✓ 符合工業物聯網VPC安規標準(EMC安規+資安安規)

SP250-A04 is compliant with AIOT VPC safety standards, encompassing both EMC and cybersecurity criteria.

✓ 便利性：使用4G LTE上網，因大多地處偏遠，免除申請DSL/Fiber網路的困擾

Convenience : Revolutionize connectivity with 4G LTE, bypassing the hassles of DSL/Fiber network applications. Ideal for remote areas, our product ensures a smooth and hassle-free internet experience.

✓ 安全性：VPN 通訊協定，確保資料絕佳安全性

Security : Prioritize data security with built-in VPN protocol for optimal protection against potential threats.

✓ 可靠性：斷線時持續記錄，並於重新連線後自動上傳資料

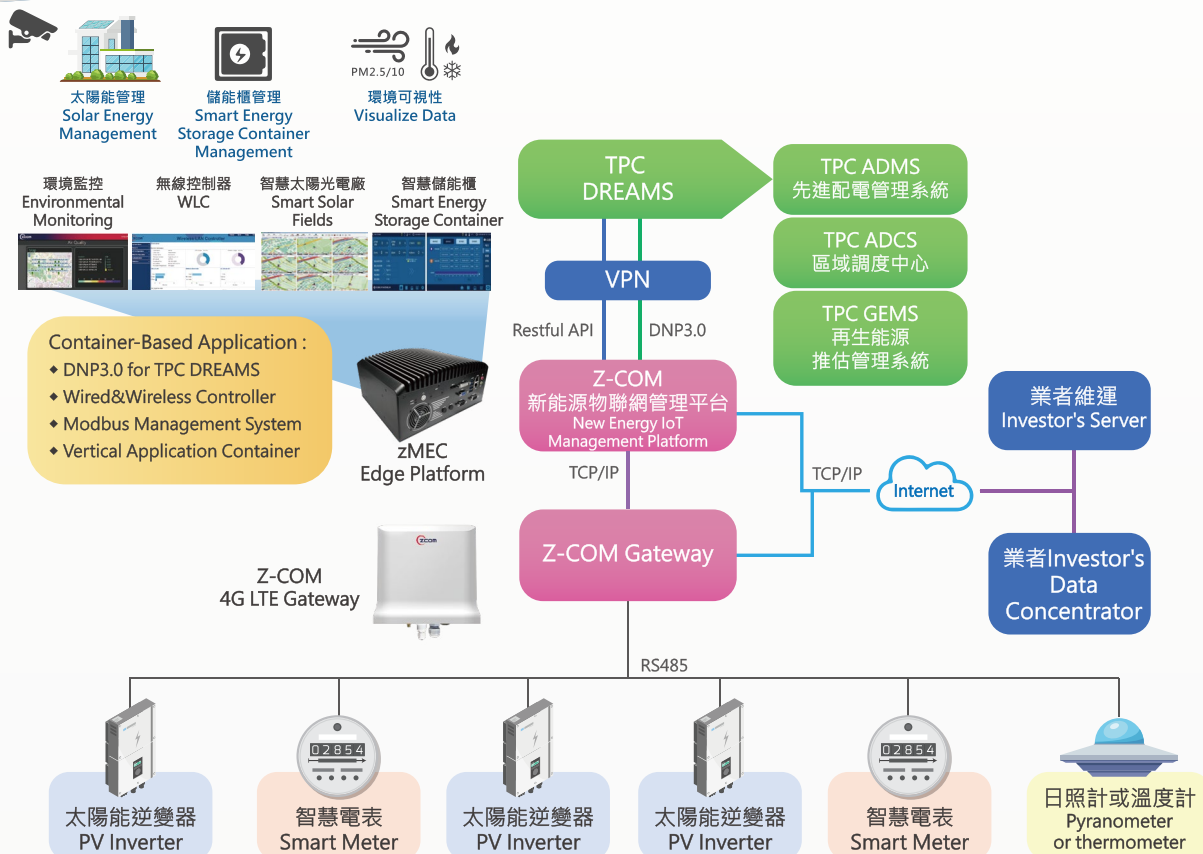
Reliability : Uninterrupted data recording during disconnections, with automatic upload upon reconnection for reliable performance.

✓ 客製化：智捷科技自研產品可彈性提供API客製化需求

Customization : Tailor your smart city experience with our open API platform. Empower developers to create customized solutions, fostering innovation and adaptability within your unique urban ecosystem.

✓ 堅固耐用結構設計：IP67防塵防水等級、耐寬溫，14級防風標準、UL746C紫外線保護

Rugged and Durable Design : IP67 dustproof and waterproof rating, wide operating temperature range, 14-level windproof capability, and UV protection (UL746C) ensure durability in urban environments.



Wireless Surveillance Solution



高品質影像監控 High Resolution Surveillance

為高解析度影像提供足夠頻寬做穩定傳輸
Provide bandwidth essential for high resolution image for stable transmission

透過邊緣運算減低延遲以提升傳輸效率
Reduce latency through edge computing to improve transmission efficiency

高速穩定的無線網路 High-speed and Reliable Wi-Fi Network

內建高增益天線可增大傳輸距離與範圍
Built-in high gain antenna extend the transmission distance and coverage

5GHz優先降低雜訊干擾
Utilize 5GHz frequency band as a priority to minimize interference

低建置與維護成本 Low Costs for Deployment and Maintenance

集中管理平台，進行無線存取點大規模批次設定
Centralized management for bulk AP configuration to enhance the efficiency of network deployment

搭載PoE out供電，簡化安裝程序
PoE-powered to reduce cabling



智慧交通 Smart transportation



智慧工地 Smart Construction Site Management



智慧社區 Smart Community



可擴充監視系統
Scalable Surveillance system



口罩檢測
Mask detection



人群檢測
People flow management



可彈性移機至下一工地
Moving flexibly to next site



社交距離檢測
Social distance detection



事件警報
Event warning



入侵檢測
Intrusion Detection



彈出式實時查看AI事件
Real-time pop-ups



溫度檢測 臉部辨識打卡
Temperature detection Facial recognition



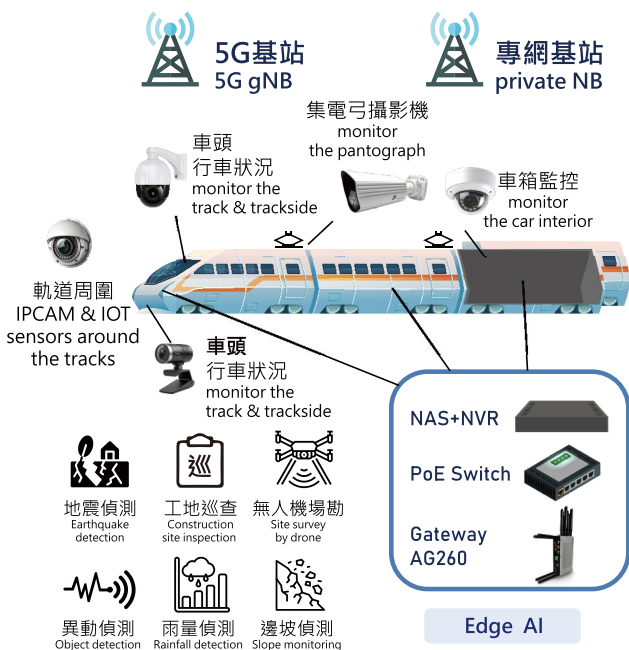
智能物件偵測
AI Object Detection



車牌辨識
Automatic number-plate recognition



違規停留檢測
Illegal parking detection



公網
Public network

4G LTE
5G NR
GPS



集電弓系統中繼站

Relay for pantograph monitoring system

Wired & Wireless Management

Load Balance

Low Latency

Container-Based Microservices Platform

Nvidia GPU

管理 Management 多網融合 heterogeneous network (5G, Wi-Fi 6) Middlebox
資安 Cybersecurity 通訊框架 communication framing: MQTT/OPC-UA/RESTful
通訊資安 communications security: Firewall / IDS / IPS
效能 Efficiency AI邊緣運算-影像分析 AI Edge computing, image analysis

zMEC Platform 5G 多網融合軌道通訊平台
5G heterogeneous network management platform for rail



Tunnel



WLC Deploy a manageable, Intelligent, Easy Network



Cutting-Edge Technologies

- 無縫漫遊
Seamless roaming
- 自動頻道
Auto channel
- 頻寬控制
Bandwidth control
- 5GHz 優先
Auto channel
(5GHz prioritization)
- 負載平衡
Load balance
- 自動功率調整
Auto power

Key Features

- SDN架構
- 集中管理
Centralized
- 即時監控
Real-time monitoring
- 遠端故障排除
Remote Troubleshooting
- N+1 Backup
- 集中轉發
Central forwarding

zMEC Edge Computing Platform

Core

Edge

Access



Kubernetes(K8S)

Network Slicing

URLLC

Superior Scalability

Load Balance



高擴充性
Scalability



降低佈建成本
Low deployment cost



快速反應時間
Low-latency connectivity



高可用性/高彈性
High Flexibility



自動調配資源
Resource Allocation



資料安全性
Security

Z-COM Wi-Fi 6 / 6E Product

Coverage



SP250 Outdoor AP

2.4GHz / 5GHz Concurrent
Omni-directional antennas
for coverage

PTP/Coverage



SP250-S5 Outdoor AP

2.4GHz / 5GHz Concurrent
2.4GHz for coverage
5GHz directional antennas
for PTP Long Distance

4G LTE



SP250-A04 Backhaul AP/ Gateway

2.4GHz / 5GHz Concurrent

PtP/PtMP



SP230-S5 Outdoor AP

2.4GHz / 5GHz Concurrent
2.4GHz Omni antennas 5GHz
Directional antennas
6km 100Mbps

5G NR



AG260 Railway Gateway

2.4GHz / 5GHz Concurrent
EN 50121 Railway applications
Electromagnetic compatibility
EN 50155
M12 X-Coded

Coverage



AS240 Entry-level Indoor AP

2.4GHz / 5GHz Concurrent
Omni-directional antennas for
coverage

PtP/PtMP



AX-931 Wi-Fi 6E module

4X4:4 MU-MIMO
QCN 9074 160MHz Up to 4800Mbps
Max 21dBm per chain
M.2 E Key Interface



Access Point Features Highlight



IP67 Rating



Windproof



Wide
Temperature



High
Power



PoE Out



km
Transmission



Versatile Placing
Options



Simple
Design



Strongest
Competitiveness



5GHz
Priority



Anti-tamper
Lock



MU-MIMO



Point-to-(Multi) Point Wireless Network Enables a Real-time Slope Monitoring System



✓ 節省龐大建置費用

Cost-Efficient Deployment: Significantly reduces deployment costs.

✓ 加強訊號覆蓋，網路快速且穩定

Improved Signal Coverage: Creates a fast and reliable wireless network.

✓ 掌握現場即時情況

Real-Time Onsite Monitoring: Enables control and monitoring of onsite conditions.

✓ 即時回報工程車輛狀況和環境監控

Instant Reporting: Provides real-time status updates on engineering vehicles and environmental data to the control center.

✓ 施工期短、安裝維護容易

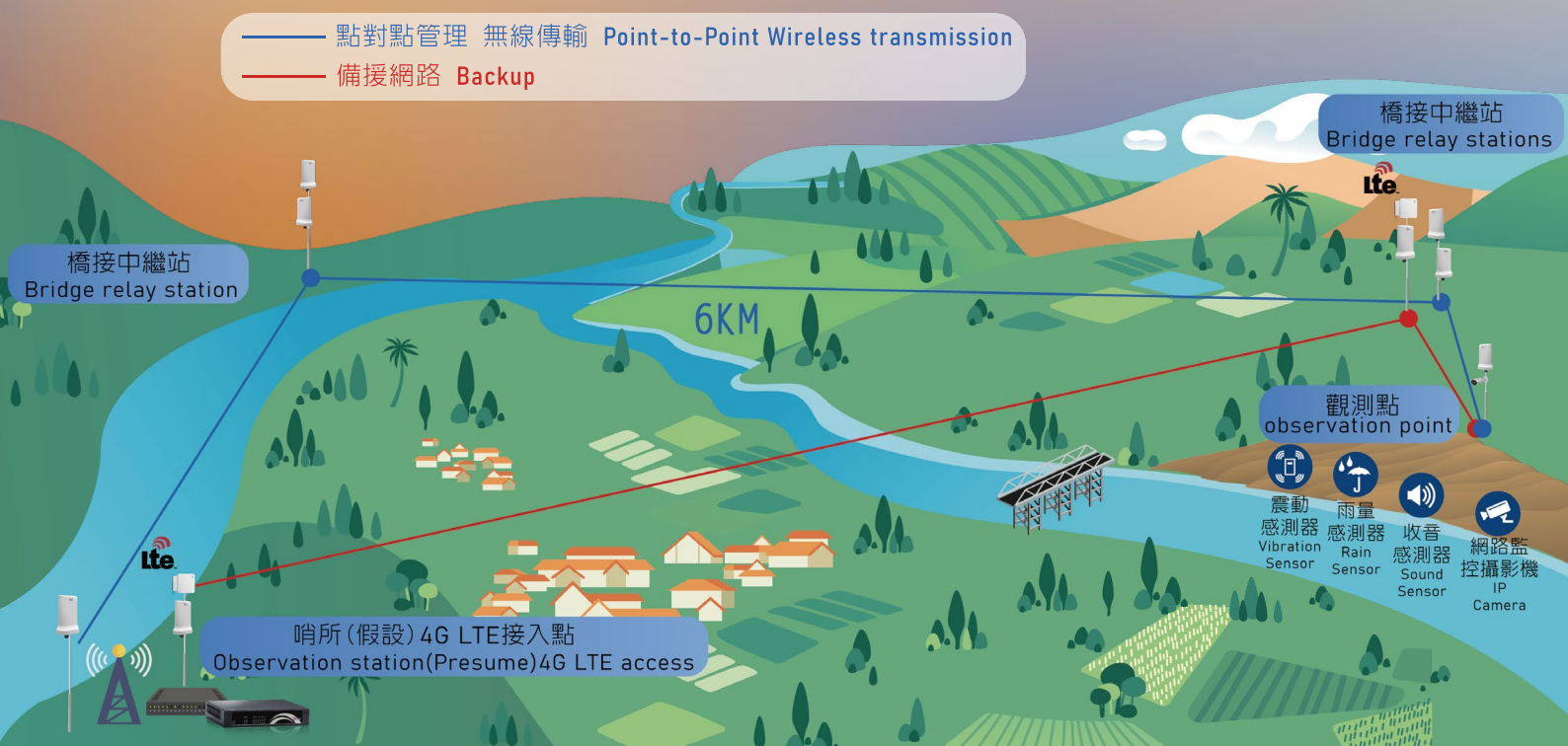
Quick Installation and Maintenance: Ensures easy and rapid installation with straightforward maintenance.

✓ 數據統一管理

Centralized Data Management: Facilitates centralized management of data.

✓ 由專業人員規劃安裝測試網路

Professional Network Planning: Allows network planning and testing conducted by skilled personnel.



Wi-Fi 7 802.11be Qualcomm Solutions

OEM/ODM

Customized

Made in Taiwan

Wi-Fi Expert
30 years
experience

SMT/DIP
Factory

Go to
Market

Thermal
Module



Miami IPQ 5332 2.4GHz
+
Waikiki QCN9274 5GHz
6GHz



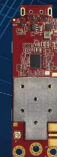
AX-931
Wi-Fi 6E 6GHz



AC-924
Wi-Fi 5 5GHz



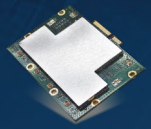
AC-928
Wi-Fi 5 3x3
2.4GHz or 5GHz



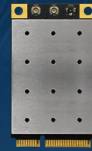
AC-720M
Wi-Fi 5 USB Module
2.4GHz or 5GHz



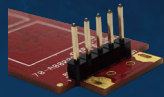
AX-930
Wi-Fi 6 5GHz



AC-923
Wi-Fi 5 2.4GHz



AC-928
Wi-Fi 5 2x2
2.4GHz or 5GHz



Customized RF high power /
Industrial/ Small form factor design
EMC compatibility & Reliability Test
RF-related patents Firmware
development Cross-platform
software integration

Capability
R & D
技術實力
研發

Design for
manufacturability and
with its own
production lines

Production
生產製造
能力

Quality
control with
strict standards
嚴格控管品質

Quality of all manufacturing
processes from design,
manufacturing to service is
reviewed and refined

With
various
certifications
驗證通過多項

ISO9001 · ISO14001
REACH · RoHS



Cooperate with Z-COM, planning your projects

Z-COM with software & hardware R&D experiences nearly 30 years in Wi-Fi industry is committed to fulfill its social and environmental responsibilities and expect our suppliers to share this commitment.

About Z-COM



成立於1995年，智捷科技專注於無線

通訊研發與製造。憑藉近30年技術實力，成功推動大規

模Wi-Fi Offload和智慧城市項目，全球部署數百萬運營商級Wi-Fi基地台，

連接超過五億使用者。近年來更多次與中國、印度電信商合作佈建智慧城市，積極與IoT世代網路應用接軌。

作為無線網路和混合組網的專業網路系統供應商，智捷科技整合5G、Wi-Fi/AIoT技術，積極佈局專用網路系統和邊緣運算的AIoT應用，打造新一代的移動寬頻應用。

Since 1995, Z-COM pioneers wireless communication R&D, boasting nearly 30 years of expertise. We've successfully led global Wi-Fi Offload and smart city projects, connecting 500+ million users with millions of carrier-grade Wi-Fi stations. Collaborating with telecom giants in China and India, we actively embrace IoT-era network applications.

As a top-tier provider in wireless and hybrid networking, Z-COM integrates 5G, Wi-Fi, and AIoT technologies. Our strategic deployment includes dedicated networks and edge computing for AIoT, shaping the next-gen mobile broadband solutions.



+886-3-5777364



www.zcom.com.tw



z-com@zcom.com.tw
sales@zcom.com.tw



新竹市東區新竹科學園區新安路8號5樓
5F, No. 8, Hsin-Ann Road, Hsinchu
Science Park, Hsinchu, Taiwan

