Zyxel ZoneDAS Series

Zyxel ZoneDAS Series, including "ZoneDAS", "ZoneDAS One", "ZoneDAS Two", and "ZoneDAS Two Plus", is an Active or Hybrid DAS solution designed for medium to large buildings, addressing weak or nonexistent indoor mobile signals.

Utilizing Ethernet or optical fiber cabling, the system architecture is similar to WiFi, consisting of Base Unit (BU), Remote Unit (RU), and optional Expander and Line Extender. With simple system planning and deployment, installation is fast and efficient, significantly reducing labor and construction costs.

Visit us at https://www.zyxel.com/global/en/form/in-building-cellular-coverage for more information

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Modular Design for Scalability and Future-proofing

The ZoneDAS Series features a **modular system design**, allowing flexible RU band selection for single/multi-MNOs, 4G SISO, or 5G MIMO across 1-8 bands.

Supporting **1 to 64 or 128 Remote Units**, our solutions ensure precise coverage with unparalleled flexibility and scalability. Its modular design enables seamless upgrades and adjustments, maximizing investment value while adapting to evolving project needs.

Superior Performance for Diverse Applications

With exceptional voice call quality and ultra-fast data transmission, the ZoneDAS Series stands as the most powerful, cost-effective, and future-proof DAS solution on the market. It caters to a wide range of indoor mobile communication coverage needs, including residential buildings, commercial office towers, hospitals, hotels, university campuses, shopping malls, airports, metro stations, train stations, 5G private networks, and smart buildings, ensuring a seamless mobile experience for all mobile users.

A Snapshot of ZoneDAS Series

ZoneDAS

Ethernet cabling
1~4 bands
Total Bandwidth 80Mhz

ZoneDAS One

Ethernet cabling
1~4 bands
Total Bandwidth 280Mhz

ZoneDAS Two

2-core fiber cabling
1~4 bands
Total Bandwidth 800Mhz

ZoneDAS Two Plus

4-core fiber cabling
4~8 bands
Total Bandwidth 1600Mhz

WiFi-Like System Planning

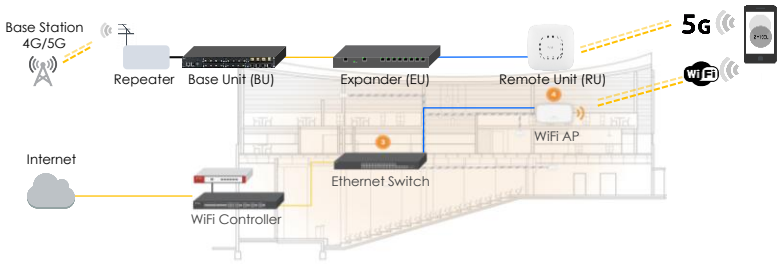
Ultra-Simple System Architecture! With Zyxel Active DAS Solutions, designing a DAS system is as simple as planning a WiFi network. The Base Unit (BU) functions like a WiFi Controller, the Expander acts as an Ethernet Switch, and the Remote Unit (RU) operates like a WiFi Access Point (AP).

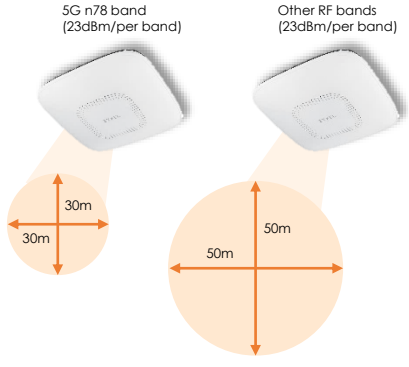
Unlike traditional passive DAS, which requires complex and time-consuming signal attenuation calculations, Zyxel Active DAS Solutions eliminate this hassle—just install RUs where coverage is needed, just like placing WiFi APs.

Each RU features a built-in active omnidirectional antenna, ensuring seamless indoor coverage:

- n78 band: Covers up to 30m x 30m (900m²).
- Other RF bands: Covers up to 50m x 50m (2,500m²).

The intuitive, scalable design makes deployment quick and future expansions effortless.





Flexible Modular System for Up to 4 or 8 Bands

Zyxel Active DAS solutions support **1 to 4 RF band modules**, or up to **8 modules (ZoneDAS Two Plus only)**, enabling flexible frequency configurations based on your needs. With a selection of RF modules covering **different bands**, the modular design ensures flexibility and cost-efficient investment. If future modifications or upgrades to the band configuration are required, simply **swap out the RF band modules for a seamless upgrade**—no unnecessary costs or complex adjustments. (Note: Supported bands and bandwidth may vary by model.)

4G+5G All-in-One

No matter if it's FDD Band 1, Band 3, Band 8, Band 28 for 4G or 5G, or even TDD bands like n78 and n41 specifically for 5G, you can select and combine these RF band modules for a single system to create a 4G or 5G DAS, or a system for both. Supporting 256QAM with low signal latency, our solutions seamlessly relay signals of **different generations of mobile communication technologies**. Whether it is GSM, UMTS, WCDMA, LTE, HSPA, NR, or NB-IoT, all signals transmitted within the supported frequency range **can be supported simultaneously**.

Multi-Carrier Support

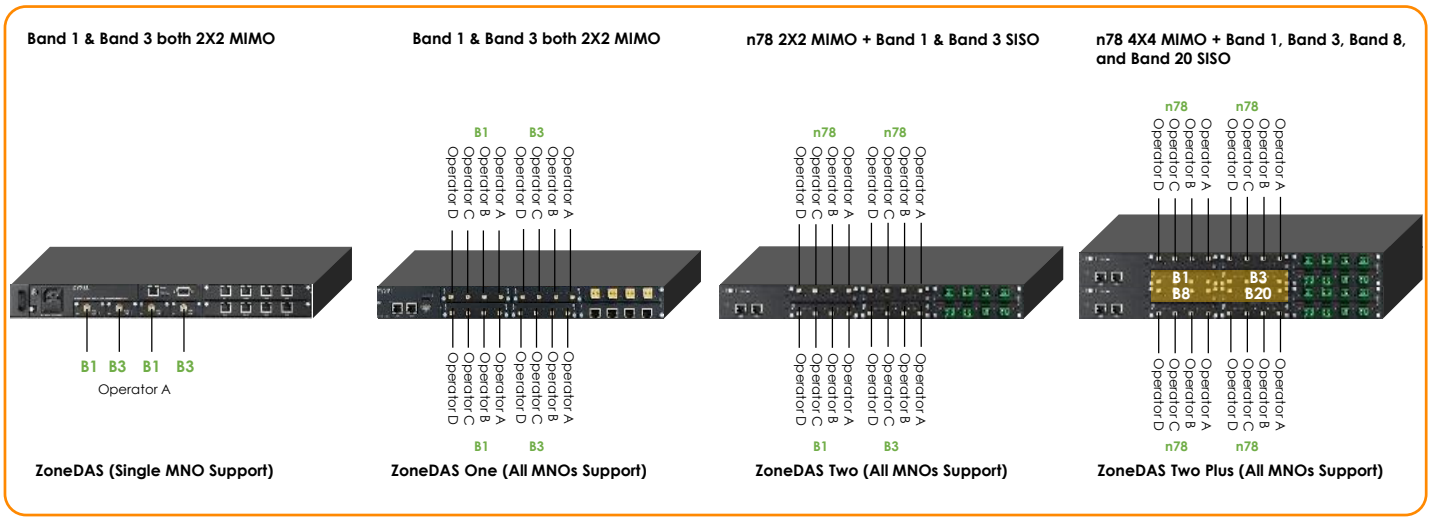
Each BU's RF band module (RF POI module) features either **1 or 4 SMA signal input ports**, allowing the system to accept 1 or 4 sub-channel signal sources. Within the supported bandwidth, the system can integrate signals from 1 or multiple mobile operators. It automatically **equalizes** the signal strength of up to four inputs from different operators before **combining** and **distributing** them, ensuring seamless signal relay.

Flexible Signal Source

Zyxel Active DAS Solutions enable flexible deployment beyond MNO base stations. They support direct connections to Macro, Micro, Small Cell, and ORAN-RU, or receive **over-the-air** signals via outdoor antennas. Amplification with brand-agnostic **low-power repeaters** allows IT-based integrators to deploy DAS projects independently and efficiently.

SISO or MIMO? You Decide.

With full flexibility, you can configure the system as SISO or MIMO based on your needs. Simply select 2 or 4 identical RF band modules to set up 2X2 (2T2R) or 4X4 (4T4R) MIMO with ease.



Highly Scalable

Each system supports up to **8 optional Expander Units**, accommodating a maximum of **64 or 128 Remote Units (RU)**. Each RU features a built-in antenna for every RF band module, ensuring a hassle-free installation—simply place an RU where coverage is needed, and the setup is complete.

Even in ultra-large buildings covering up to **160,000m²**, a single system can provide seamless and reliable coverage.

Need to expand coverage in the future? No problem! Just add more RUs as needed—without affecting the coverage of the existing system.

Ethernet or Optical Fiber Cabling

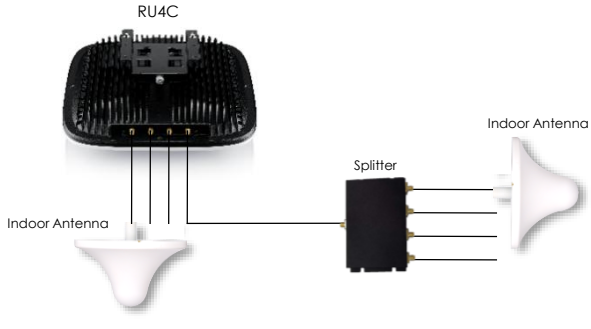
Say Goodbye to Coaxial Cables! Our active DAS solutions utilize **Ethernet or optical fiber cabling**, enabling **faster deployment, simpler installation**, and **significantly reduced material, equipment (e.g., cranes), and labor costs**.

- **All-Ethernet Architecture (ZoneDAS & ZoneDAS One)**
  With optional Expander & **Line Extenders**, the maximum cabling distance from BU to RU can reach **up to 400 meters**.
- **All-Fiber Architecture (ZoneDAS Two & ZoneDAS Two Plus)**
  With optional **Expander Units**, the system provides **higher total relay bandwidth** and supports distances **up to 5 kilometers** from BU to RU.

Connecting to External Antennas

Deploying an RU in every small room may seem excessive—but no worries!
Zyxel ZoneDAS Series offers a **hybrid DAS option** with **RU4C** (RU with 4 connectors). Unlike standard RUs, RU4C **does not have a built-in antenna**. Instead, it **combines** all RF bands and **outputs** the signal through **4 SMA ports**.

These SMA ports can be connected via coaxial cables, splitters, and couplers to **multiple external indoor antennas** (omnidirectional, directional, panel antennas, etc.), ensuring **cost-effective** coverage while minimizing signal loss from walls and doors in multiple compact spaces.



Intuitive Management & Remote Monitoring

Simply connect the BU to a computer and you can effortlessly manage all system components—including all Remote Units, Expanders, Line Extenders, and RF band modules—through an intuitive Web GUI (Graphical User Interface).
With VPN access, **remote system management**, **monitoring**, and **configuration** are easily achievable. Additionally, the system supports **SNMP** and **syslog messaging**, ensuring seamless integration with third-party network management software.

Made in Taiwan

100% Designed, Developed, and Manufactured in Taiwan
We are unwavering in our commitment to innovation and product quality. Every unit is meticulously researched, designed, developed, and manufactured in Taiwan, ensuring information security with exceptional performance and reliability.