

## 1800MHz&2100MHz Dual-band SDAS

*Model: SDAS-264(Master Unit)*

The SDAS is an advanced low power solution for multi-band & multi-network & multi-vendor & multi-operator network coverage extending. It can be deployed flexibly and evaluated smoothly with high scalability. The system consists of three parts: Master Unit(MU), Distributed Control Unit(DCU) and Remote Unit(RU).

The MU is installed next to the base stations (BTS) typically, the MU captures the BTS signal via direct coupler, then converts it into optic signal and transmits the signal to the DCU via fiber optic cable. The DCU is installed in the IT room typically, the DCU converts optic signal into digital signal and transmits the digital signal to the RU via twisted pair (CAT6A) cable. The RU will reconvert the digital signal into RF signal and provide the signal to the areas where network coverage is inadequate. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction.



### Features

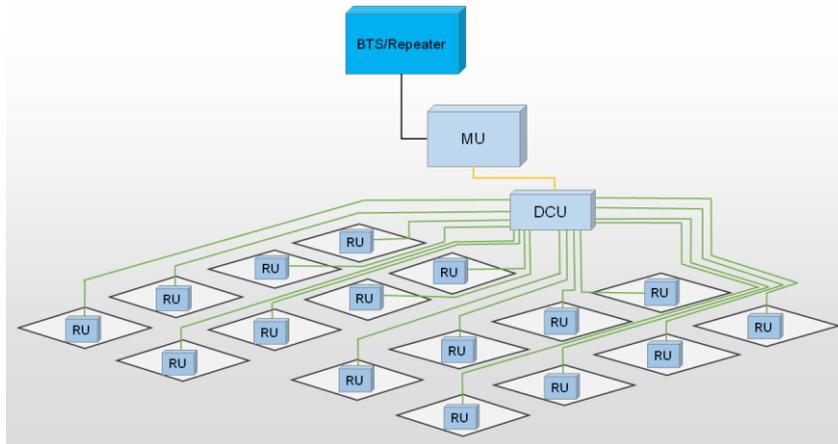
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable
- Digitalized cellular signals from DCU are converted to Ethernet format, Deliver data and power to RU via twisted pair cabling
- Stable and improved signal transmission quality
- One MU can support up to 4 DCUs to maximize utilization of fiber optic cable, One DCU can support Up to 16RUs to reduce the number of MU and PoE feature to RU
- RJ45 port provides a link to a notebook for local supervision or IP Based NMS (Network Management System) that can remotely supervise repeater's working status and download operational parameters to the repeater via Ethernet/LAN

### Applications

To expand signal coverage or fill signal blind area where signal is weak or unavailable.

Indoor: Hotels, exhibition centers, basements, shopping malls, offices, parking lots, ...

## Application Diagram



## Technical Specifications

| Item                                   | Specifications               |                           |
|--|------------------------------|---------------------------|
| System                                 | LTE1800&UMTS/LTE2100         |                           |
| Working Frequency                      | Uplink                       | 1710~1775MHz&1920~1980MHz |
|  | Downlink                     | 1805~1870MHz&2110~2170MHz |
| Working Bandwidth                      | 65MHz&60MHz                  |                           |
| MU Extensible Support the DCU Quantity | 4                            |                           |
| System Gain                            | 35±3dB(Cable Access )        |                           |
| Maximum Output Power(RF)               | -5±2dBm(UL)                  |                           |
| Manual Adjustable Attenuator           | 0~30dB/Step 1dB              |                           |
| Noise Figure@1RU Connection            | ≤5dB                         |                           |
| Optical Output Power                   | 2±3dBm@1310nm/-6±3dBm@1550nm |                           |
| Fiber Type/Number                      | Single mode                  |                           |
| Optical Wavelength                     | 1310nm/1550nm                |                           |
| Optical Connector Type                 | 8xFC/APC                     |                           |
| RF Connector Type                      | 2xN-Female                   |                           |
| I/O Impedance                          | 50Ω                          |                           |
| Ingress Protection                     | IP30                         |                           |
| Local Monitoring Interface             | RJ45                         |                           |
| Remote Monitoring                      | Ethernet/LAN(Web Browser)    |                           |
| Operating Temperature                  | -0°C~55°C                    |                           |

|                            |                  |
|----------------------------|------------------|
| <b>Relative Humidity</b>   | ≤95%             |
| <b>Dimensions</b>          | 485mm×350mm×43mm |
| <b>Weight</b>              | ≤5Kg             |
| <b>Mounting Type</b>       | Wall Mount       |
| <b>Power Supply</b>        | POE              |
| <b>Power Consumption</b>   | <20W             |
| <b>Battery Backup/Time</b> | 30minutes        |
| <b>MTBF</b>                | >50000hours      |