

1800MHz&2100MHz Dual-band SDAS

Model: SDAS-246 (Remote 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

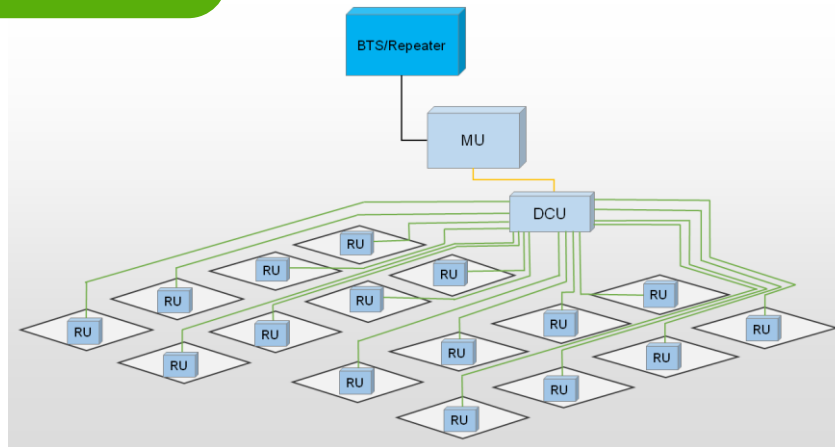
- Tx/Rx control and alarm messages can be transmitted via one fiber optic cable
- Digitalized cellular signals from DCU are converted to Ethernet format, Deliver data and power to RU via twisted pair cabling
- Stable and improved signal transmission quality
- One Master Unit can support up to 8 Remote Units to maximize utilization of fiber optic cable
- 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	
Frequency Stability(+/-0.01ppm)	≤0.01ppm	
RMS Output Power@Bandwidth	23±2dBm	
Gain Flatness	≤±3dB for All Band	
AGC/ALC Function	Support	
AGC/ALC Range	10dB	
Noise Figure@Max.Gain(DL/UL)	≤5dB	
Group(System) Delay	≤1.5us	
Ingress Protection	IP30	
Cooling Function	Heatsink	
Local Monitoring Interface	USB2.0	
Remote Monitoring Module	Through DCU via CAT6A Cable	
RJ45 Port	1XRJ45(Max. Distance 100m @CAT6A)	
RF Connector Type	1xN-Female	
Operating Temperature	-10°C~55°C	
Relative Humidity	≤95%	

Dimensions	188mm×265mm×68mm
Mounting Type	≤5kg
Power Supply	AC100V- AC240V, 50/60Hz
Power Consumption	≤20W
Battery Backup/Time	30minutes
MTBF	>50000hours
Software Support MU/RU Models	Same EMS support different model of MU/RU
Adjustable Parameters Function	Set and display MU and RU ID and Location, adjust the Downlink/Uplink gain, turn on/off the RF power amplifier, remote turn on/off or restart RU;
Monitored Parameters	Real-time status for downlink output power(RSSI), optical power;
Alarm Type Classification	Three levels (such as Major, Minor, and Warning)
Alarm Parameters	Real-time alarm for Low output power, Over output power, etc;
Interface Remote/Local Software	Terminal software suitable for Windows 7 and the above system
EMS Server	Provide GUI interface for configuration the MU and RU, remote management each RU by MU, to set the parameters of RU, and monitoring the status and alarms