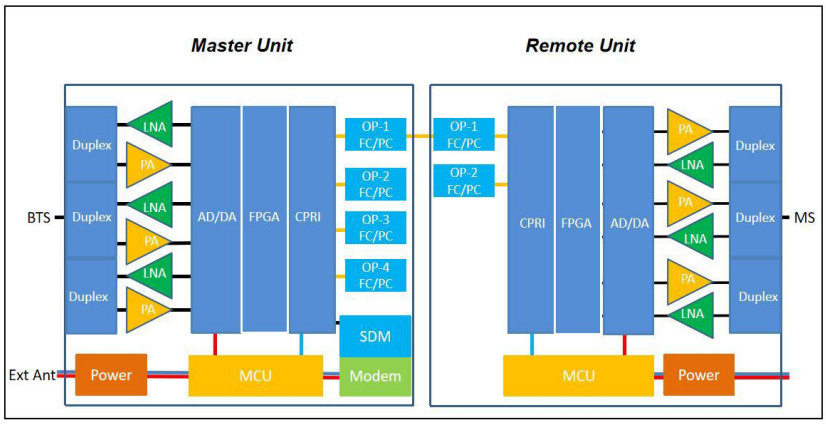
Tri- Band Digital Fiber Repeater

1800+2600+3500 MHz TS-SDAS-DRU-L2+N (37dBm)

Tone Spread
Solutions for Wireless Signal

LTE1800+LTE2600+ NR 3500



Digital Fiber Repeater use the software defined radio (here we call SDR) technology to transfer the mobile signals into digital numbers of 0 and 1, so that the signals can be processed in the digital mode. Compared with analog fiber repeaters, SDR not only is able to improve the cell enhancement performance, but also strengthen and add more functions to the fiber repeaters. SDR enables the future networks to work on a single hardware platform, and realize the systems of different frequencies and more functions simply by software, which in a long run will make the system more flexible, easier and quicker to implement without cost increase.

Compared with building a new base station, digital fiber repeater is a more economical solution to improve signal coverage and communication quality. And it is easy to install and maintain, which can help operators quickly achieve coverage results.

Key features

- ✧ Supports voice and data services
- ✧ Optical transmission up to 10km (max.)
- ✧ Digital filtering, reducing interference, improving quality
- ✧ Built in Automatic Gain and Automatic Level Control Function (AGC/ALC) to maintain stable operation
- ✧ Support LTE-FDD/5G NR Access Technology
- ✧ Optional Internal and External Antennas
- ✧ RJ45 Cable for local connection & Wireless modem for remote monitoring (optional)
- ✧ Delay compensation function, simple system optimization

Remote Unit Master Unit

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Specifications

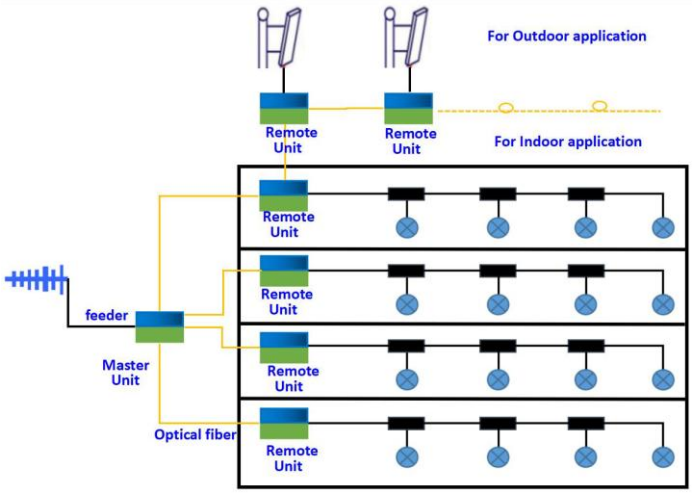
TS-SDAS-DRU-L2+N		1800 MHz	2600 MHz	3500 MHz
Frequency Range	Uplink	1710 - 1785 MHz	2500 - 2570 MHz	3300 - 3570 MHz
	Downlink	1805 - 1880 MHz	2620 - 2690 MHz	3300 - 3570 MHz
Number of Sub-Bands		1	1	1
Bandwidth		Max.75 MHz	Max.70 MHz	Max.100MHz/Carrier
No. of Remote Unit		1~4 Typical		
Max. Gain		UL≧ 90 ±2 dB; DL≧ 95 ±2 dB		
Manual Gain Control		31 dB in step of 1 dB		
Automatic Gain Control		≧30 dB		
Gain Flatness		≦ 6 dB (peak-to-peak)		
Max. Input Power Without Damage		UL: 0 dBm; DL: 10 dBm		
Output Power	Uplink	≧ 27 ±2dBm	≧ 27 ±2dBm	≧ 27 ±2dBm
	Downlink	≧ 37 ±2dBm	≧ 37 ±2dBm	≧ 40 ±2dBm
Spurious Emission	9kHz~1GHz	≦ -36dBm	≦ -36dBm	≦ -36dBm
	1GHz~12.75GHz	≦ -30dBm	≦ -30dBm	≦ -30dBm
ACPR	±20/100MHz	≦ -40dBc/30KHz	≦ -40dBc/30KHz	≦ -40dBc/30KHz
	±40/200MHz	≦ -45dBc/30KHz	≦ -45dBc/30KHz	≦ -45dBc/30KHz
Noise Figure	Uplink	≦ 6dB		
EVM		GSM/UMTS ≦ 12.5%; LTE ≦ 6%; NR ≦ 3.5%		
VSWR		≦ 1.5		
System Delay		≦ 9μs		
Impedance		50Ω		
Optical Output Power		≧-3dBm		
Optical Wavelength		1330 nm/1270 nm (DDM)		
Fiber		Dual Mode		
RF Connector		MU: N-Female *1; RU: N-Female *1		
Fiber Connector		MU: FC/PC*4; RU: FC/PC*2		
Power Supply		MU/RU:AC100~240V 50/60Hz		
Power Consumption		MU: ≦ 150 W; RU: ≦ 450 W		
Dimensions		MU:452*316*180mm; RU:490*410*187mm		
Weight		MU: ≦ 25 Kg; RU: ≦ 30 Kg		
IP Rating		MU: IP65; RU: IP65		
Operating Temperature		MU: -25~55 ℃; RU: -25~55 ℃		
Control & Monitoring	Local	Via RJ45		
	Remote	Via Wireless Modem (optional)		

Applications

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

Outdoor: Airports, tourism regions, golf courses, tunnels, factories, mining districts, villages, …

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



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