

Dual Band Digital Fiber Repeater



Tone Spread
Solutions for Wireless Signal

1800+2600 MHz

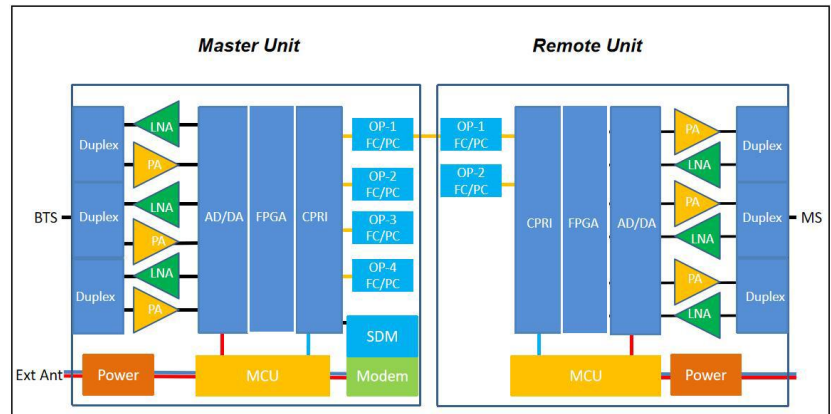
TS-SDAS-GWLI826-R8-I7 (I7dBm)

LTE1800+LTE2600

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
- ❖ Compact size and elegant appearance
- ❖ Digital filtering, reducing interference, improving quality
- ❖ Wireless air interface backhaul, saving the construction cost of network backhaul
- ❖ Support LTE-FDD/5G NR Access Technology
- ❖ Optional Internal and External Antennas
- ❖ RJ45 Cable for local connection & Wireless modem for remote monitoring (optional)



Remote Unit



Master Unit

Specifications

TS-SDAS-GWLI826-R8-I7		1800 MHz	2600 MHz
Frequency Range	Uplink	1710 - 1785 MHz	2500 - 2570 MHz
	Downlink	1805 - 1880 MHz	2620 - 2690 MHz
Number of Sub-band		I	I
Bandwidth		Max.75MHz	Max.70MHz
System Combination		LTE/NR	
Num of Remote Unit		1~8	
Max Gain		$\cong 70\pm 2\text{dB}$	
Manual Gain Control		31 dB in step of 1 dB	
Automatic Gain Control		$\cong 20\text{dB}$	
Flatness		$\cong 6\text{ dB (Peak to Peak)}$	
Max Input Without Damaged		UL: 0 dBm; DL: 10 dBm	
Output Power	Uplink	$\cong 17\pm 2\text{dBm}$	$\cong 17\pm 2\text{dBm}$
	Downlink	$\cong 17\pm 2\text{dBm}$	$\cong 17\pm 2\text{dBm}$
Spurious Emission	9kHz~1GHz	$\cong -36\text{dBm}$	
	1GHz~12.75GHz	$\cong -30\text{dBm}$	
ACPR	$\pm 20/100\text{MHz}$	$\cong -36\text{dBc}/30\text{KHz}$	$\cong -36\text{dBc}/30\text{KHz}$
	$\pm 40/200\text{MHz}$	$\cong -45\text{dBc}/30\text{KHz}$	$\cong -45\text{dBc}/30\text{KHz}$
Noise Figure	Uplink	$\cong 8\text{dB}$	
EVM		$\cong 6\%$	
VSWR		$\cong 2.0$	
System delay		$\cong 9\mu\text{s}$	
Impedance		50 Ω	
Optical output power		$\cong -3\text{dBm}$	
Wavelength		1330 nm/1270 nm (DDM)	
Num Fiber Core		Single-Mode	
RF Connector		AU: N-F *I; RU: N-F*I	
Fiber Connector		AU: LC/PC*4; RU: LC/PC*I	
Power Supply		AU/RU: AC100~240V; 50/60Hz	
Power Consumption		AU: $\cong 35\text{W}$; RU: $\cong 35\text{W}$	
Dimension		AU: 427*300*44mm; RU: 271*271*96 mm	
Weight		AU: $\cong 5\text{Kg}$; RU: $\cong 3.5\text{Kg}$	
IP rating		AU: IP30; RU: IP55	
Working temperature		AU: -10~50 $^{\circ}\text{C}$; RU: -25~55 $^{\circ}\text{C}$	
Monitoring	Local	RJ45	
	Remote	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, ...

