Digital RF Repeater_Dual Band

700-1800 MHz

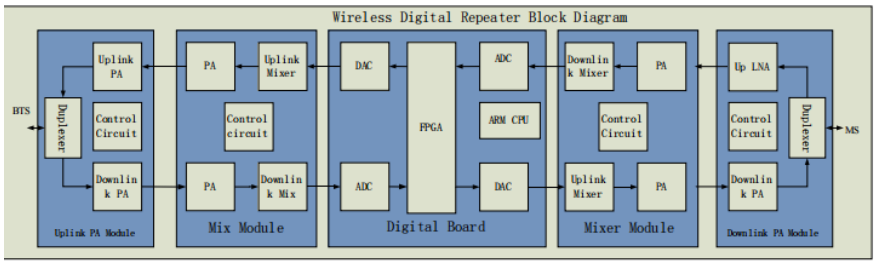
JTD-DRP-LW-85-33 (33dBm)

Tone Spread
Solutions for Wireless Signal

LTE700+LTE1800

Digital 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 repeaters, SDR not only is able to improve the cell enhancement performance, but also strengthen and add more functions to the 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 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

- Two signal ports with full duplex design.
- Linear power amplification to effectively suppress inter-modulation and spurious emission.
- Stable and improved signal transmission quality.
- Smart Automatic Level Control (ALC) ensures output level stable and adjustable continuously.
- Auto Isolation check between service and donor antennas.

Advantages

- ☑ Multi_standards/Multi_operators
- ☑ Remote control (Option)
- ☑ Bandwidth Programmable
- ☑ Multi-Band Selective
- ☑ Support to monitor donor signal parameters for easy optimization and troubleshooting

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Specifications

Electrical Data			
Item		Uplink	Downlink
Frequency Range (MHz)	LTE700 Band	703 ~ 748	758 ~ 803
	LTE1800 Band	1710 ~ 1785	1805 ~ 1880
Max. Total Output Power(dBm)@Center Frequency		23±2	33±2
Max. Gain (dB)@ Center Frequency at 25℃		80±3	85±3
Max. non-destructive input power (dBm)		≥ -10	≥ -10
ATT Adjustable Range (dB)/(Step) 1dB		0~30 @ 1 dB step	
ATT Adjustable Error (dB)		≤ |±1.5|	≤ |±1.5|
ALC (dB)		0~25	
Noise Figure (dB) (Max. Gain)		≤ 6.0 @Band edge±5MHz≤8.0dB	≤ 8.0 @Band edge±5MHz≤10.0dB
VSWR(Power up, Min Gain, Pin=-30dBm)		≤ 1.8 @Band edge±5MHz≤2.0	
Ripple In Band (P-P) (dB) At +25℃	LTE700 Band	708-743M/763-798M：≤±4.0@EBW 703-748M/758-803M：≤±6.0@EBW	
	LTE1800 Band	1715-1780M/1810-1875M：≤±4.0@EBW 1710-1785M/1805-1880M：≤±6.0@EBW	
Out of Band Rejection (dBc)At +25℃	±1MHz offset	≤-15	
	±2MHz offset	≤-30	
	±5MHz offset	≤-45	
Time Delay (us)		≤ 5.0	
EVM(%)	LTE700 Band	≤8@64QAM	≤8@64QAM
	LTE1800 Band	≤8@64QAM	≤8@64QAM
Frequency Stability(ppm)		≤±0.01	≤±0.01
Spurious Emission (dBm) @ Out Of Band 10MHz Offset;	9kHz~150kHz	≤ -36dBm/1KHz	
	150kHz~30MHz	≤ -36dBm/10KHz	
	30MHz~1GHz	≤ -15dBm/100KHz	
	1GHz~12.75GHz	≤ -10dBm/1MHz	
Impedance(Ω)		50	50
Power Consumption(W)		≤ 150	
Power Supply		110 - 220VAC~1.0A, 50 ~ 60 Hz;	

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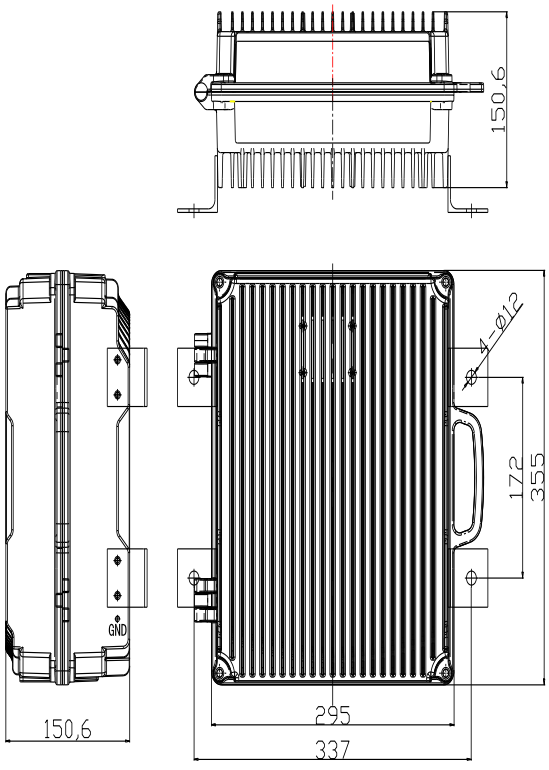
Functions -Variable Multiple Sub-band		
Maximum allowed subband spacing	LTE700 Band	45MHz
	LTE1800 Band	75MHz
Max bandwidth of Sub-band	LTE700 Band	0.2-20MHz
	LTE1800 Band	0.2-20MHz
Number of sub-band	LTE700 Band	4
	LTE1800 Band	4
Sub-band ON/OFF		YES
Environmental Data		
Operating temperature range		-25°C to +55°C
Storage temperature range		-40°C to +85°C
Relative humidity		5% - 95%
Applications		IP65(Outdoor)
Monitoring and control	Local Control	RJ45 (by OMT)
	Remote Control	LTE Modem
	LED indicator	Power, RUN, ALARM, etc.
Mechanical Data		
Dimensions		355*295*150.6mm
Weight		≤14Kg
Connectors type		N-Female
Mounting		Wall
Packing		1 Pie in box

Outline Dimension:



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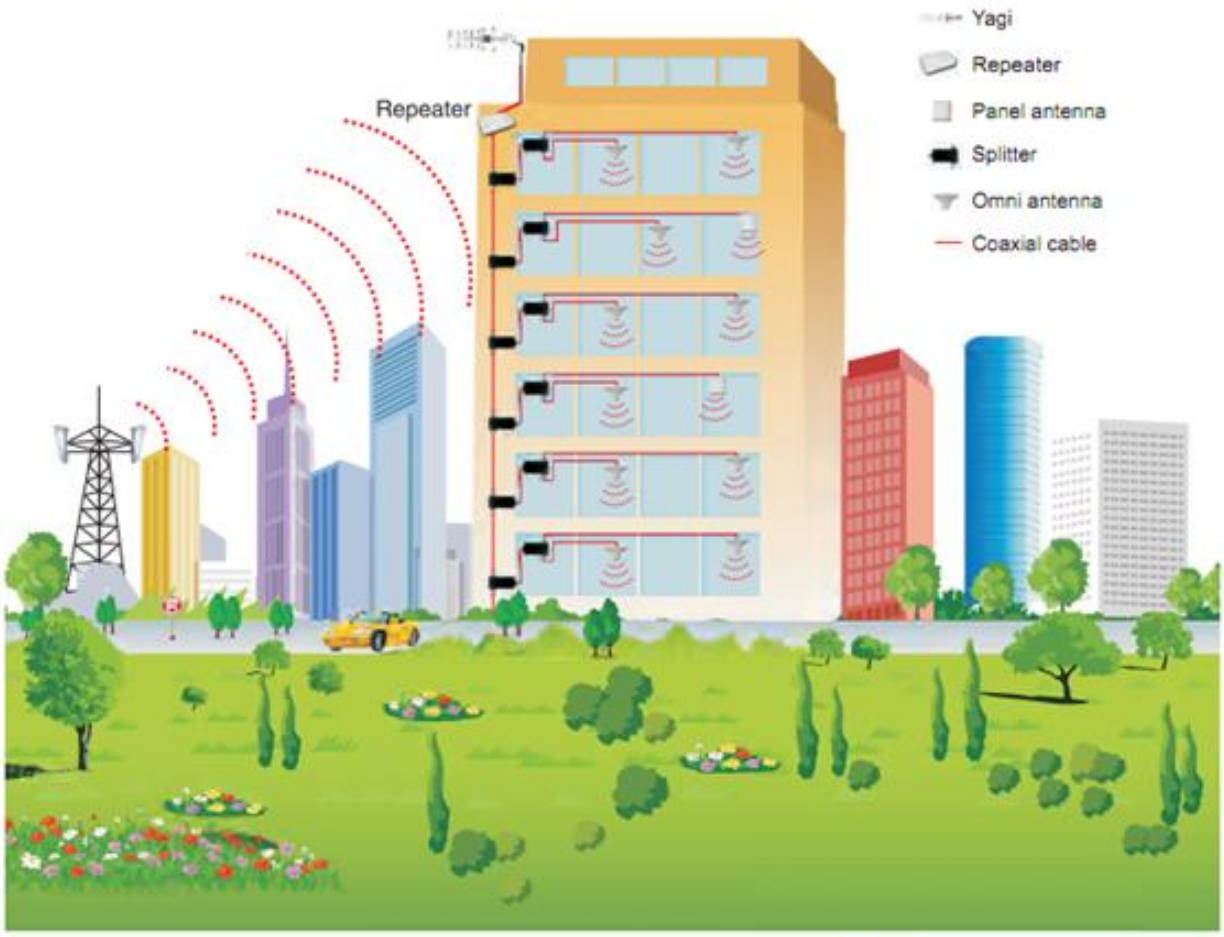
Applications

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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