Digital RF Repeater_Dual Band

1800-2100 MHz

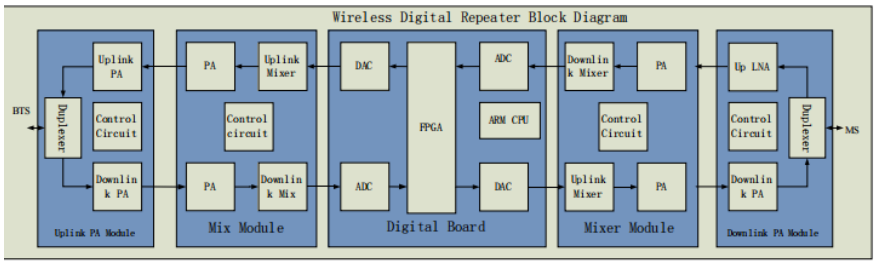
JTD-DRP-DW-90-37 (37dBm)

Tone Spread
Solutions for Wireless Signal

LTE1800+LTE/UMTS2100

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)	LTE1800 Band	1710~1785	1805~1880
	LTE2100 Band	1920~1980	2110~2170
Max. Total Output Power(dBm)@Center Frequency	LTE1800 Band	27±2	37±2
	LTE2100 Band	27±2	37±2
Max.Gain (dB)@ Center Frequency at 25℃	LTE1800 Band	85±3	90±3
	LTE2100 Band	85±3	90±3
Max. non-destructive input power (dBm)		≥-10	≥-10
ATT Adjustable Range (dB)/(Step)		0~30 @ 1 dB step	
ATT Adjustable Error (dB)		≤ |±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
Input VSWR(Power up, Min Gain, Pin=-30dBm)		≤ 1.5	
Ripple In Band (P-P) (dB)At +25℃	LTE1800 Band	1715-1780M/1810-1875M：≤±4.0@EBW； 1710-1785M/1805-1880M：≤±6.0@EBW；	
	LTE2100 Band	1925-1975M/2115-2165M：≤±3.5@EBW； 1920-1980M/2110-2170M：≤±5.0@EBW；	
Out of Band Rejection (dBc)At +25℃	±1MHz offset	≤-15	
	±2MHz offset	≤-30	
	±5MHz offset	≤-45	
Time Delay (us)		≤5.0	
EVM (%) RMS		≤8.0 @ 64QAM	
Frequency Stability(ppm)		≤±0.01	
Spurious Emission (dBm) @ Out Of Band 10MHz Offset：	9kHz~150kHz	≤-36/1KHz	
	150kHz~30MHz	≤-36/10KHz	
	30MHz~1GHz	≤-36/100KHz	
	1GHz~12.75GHz	≤-10/1MHz	
Impedance(Ω)		50	
Power Consumption(W)		≤250	
Power Supply		AC110/220V~1.5~3.0A, 50 ~ 60 Hz；	

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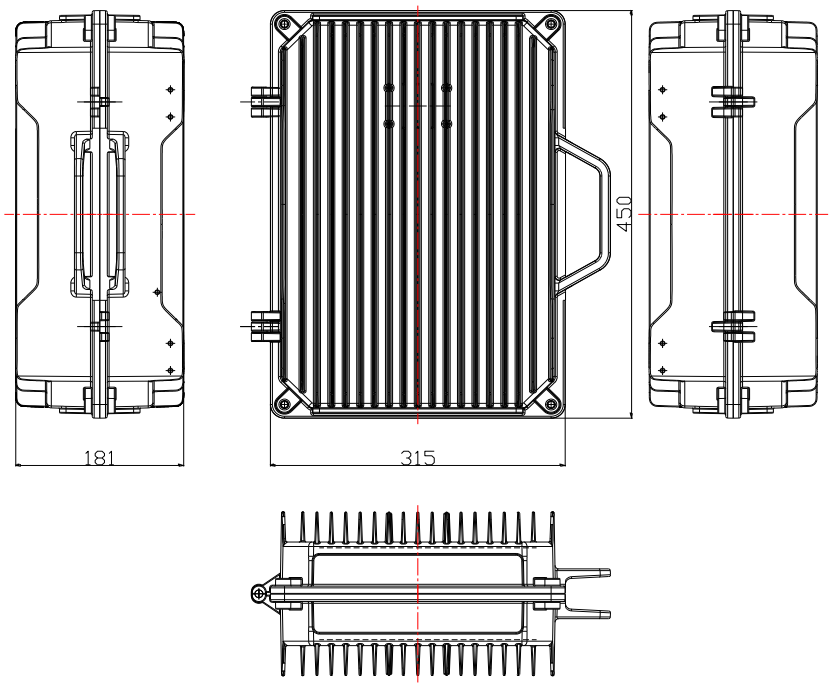
Functions -Variable Multiple Sub-band		
Maximum allowed subband spacing	LTE1800 Band	75MHz
	LTE2100 Band	60MHz
Max bandwidth of Sub-band	LTE1800 Band	0.2-20MHz
	LTE2100 Band	0.2-20MHz
Number of sub-band	LTE1800 Band	4
	LTE2100 Band	4
Sub-band ON/OFF		YES
Environmental Data		
Operating temperature range		-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		450*315*181mm
Weight		≤ 21Kg
Connectors type		N-Female
Mounting		Wall
Packing		1 Pie in box

Outline Dimension:



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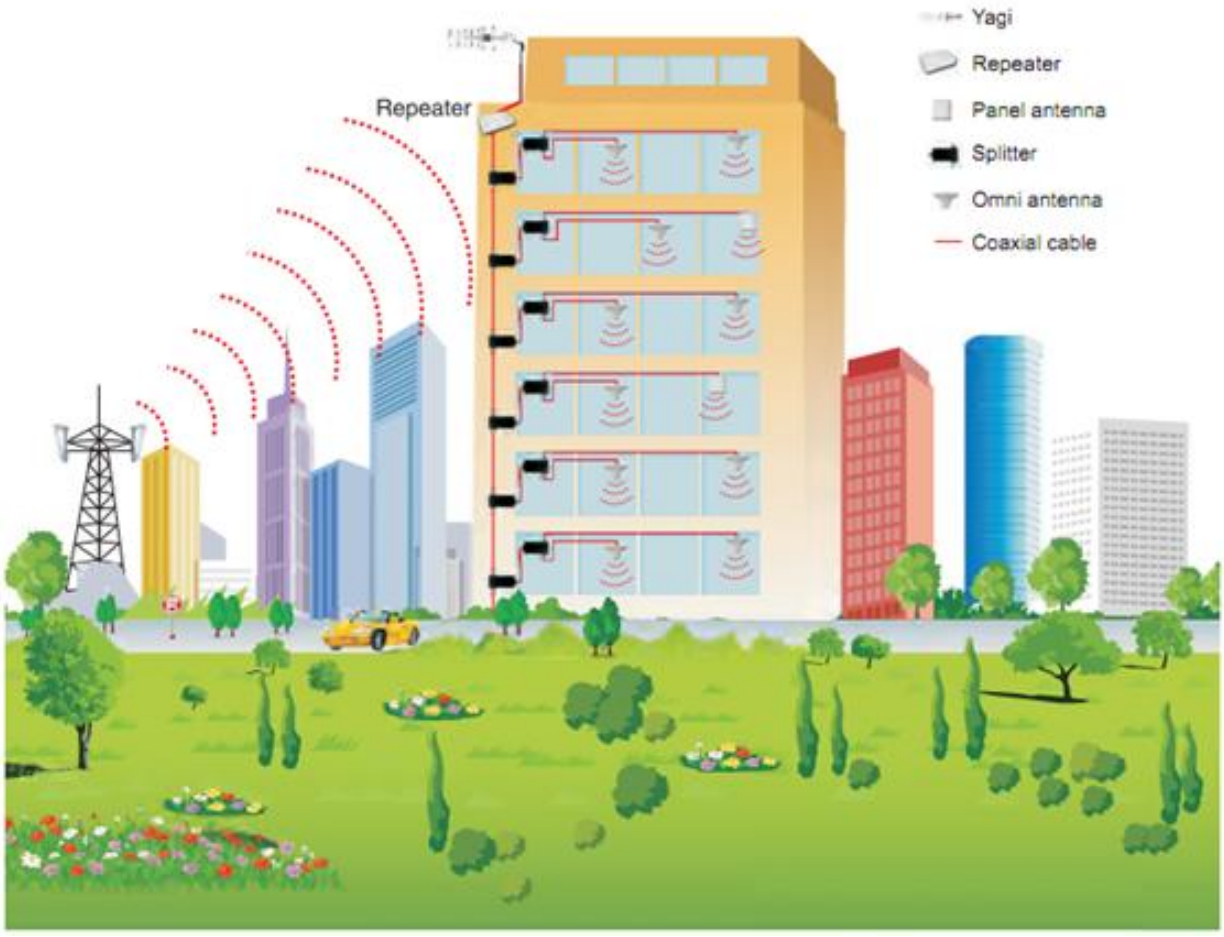
Applications

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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