Digital RF Repeater_Dual Band

1800+2600 MHz

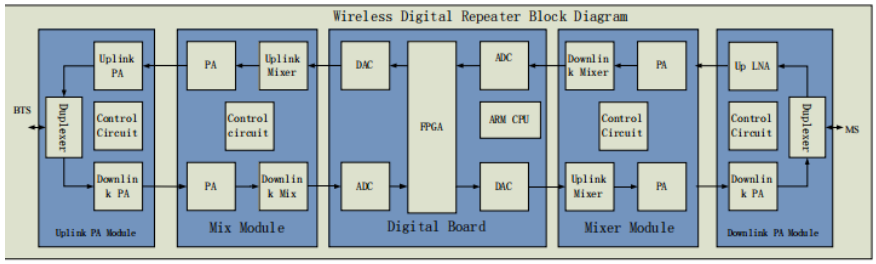
TS-DRP-DH-75-30 (30dBm)

Tone Spread
Solutions for Wireless Signal

LTE1800+LTE2600

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

ADD:11169 2F,No 141,Fu-Gang St. Taipei ,Taiwan TEL:+886-2-28828979 FAX:+886-2-28829196 E-mail: sales@tspd.com.tw

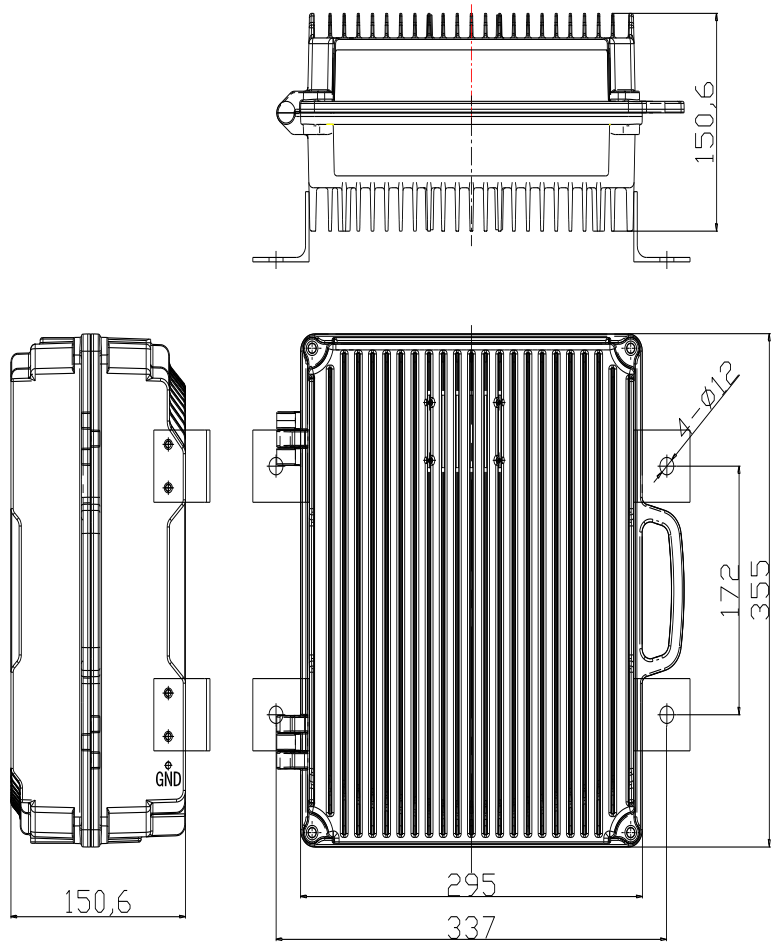
Specifications

Electrical Data			
Item		Uplink	Downlink
Frequency Range (MHz)	LTE1800 Band	1710 ~ 1785	1805 ~ 1880
	LTE2600 Band	2500 ~ 2570	2620 ~ 2690
Max. Total Output Power(dBm)@Center Frequency		20±2	30±2
Max.Gain (dB)@ Center Frequency at 25℃		75±3	70±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)		0~30	
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	
Ripple In Band (P-P) (dB) At +25℃	LTE1800 Band	1715-1780M/1810-1875M: ≤±4.0@EBW;	
	LTE2600 Band	2505-2565M/2615-2685M: ≤±4.0@EBW;	
Out of Band Rejection (dBc)At +25℃	±1MHz offset	≤-15	
	±2MHz offset	≤-30	
	±5MHz offset	≤-45	
Time Delay (us)		≤ 5.0	
EVM(%)	LTE1800 Band	≤8@64QAM	≤8@64QAM
	LTE2600 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	≤ -36dBm/100KHz	
	1GHz~12.75GHz	≤ -10dBm/1MHz	
Impedance(Ω)		50	50
Power Consumption(W)		≤ 90	
Power Supply		110 - 220VAC~1.0A, 50 ~ 60 Hz;	
Functions -Variable Multiple Sub-band			
Maximum allowed subband spacing	LTE1800 Band	75MHz	
	LTE2600 Band	70MHz	
Max bandwidth of Sub-band	LTE1800 Band	0.2-20MHz	
	LTE2600 Band	0.2-20MHz	

ADD:11169 2F,No 141,Fu-Gang St. Taipei ,Taiwan TEL:+886-2-28828979 FAX:+886-2-28829196 E-mail: sales@tspd.com.tw

Number of sub-band	LTE1800 Band	3(Can be modified according to customer needs)
	LTE2600 Band	3(Can be modified according to customer needs)
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:



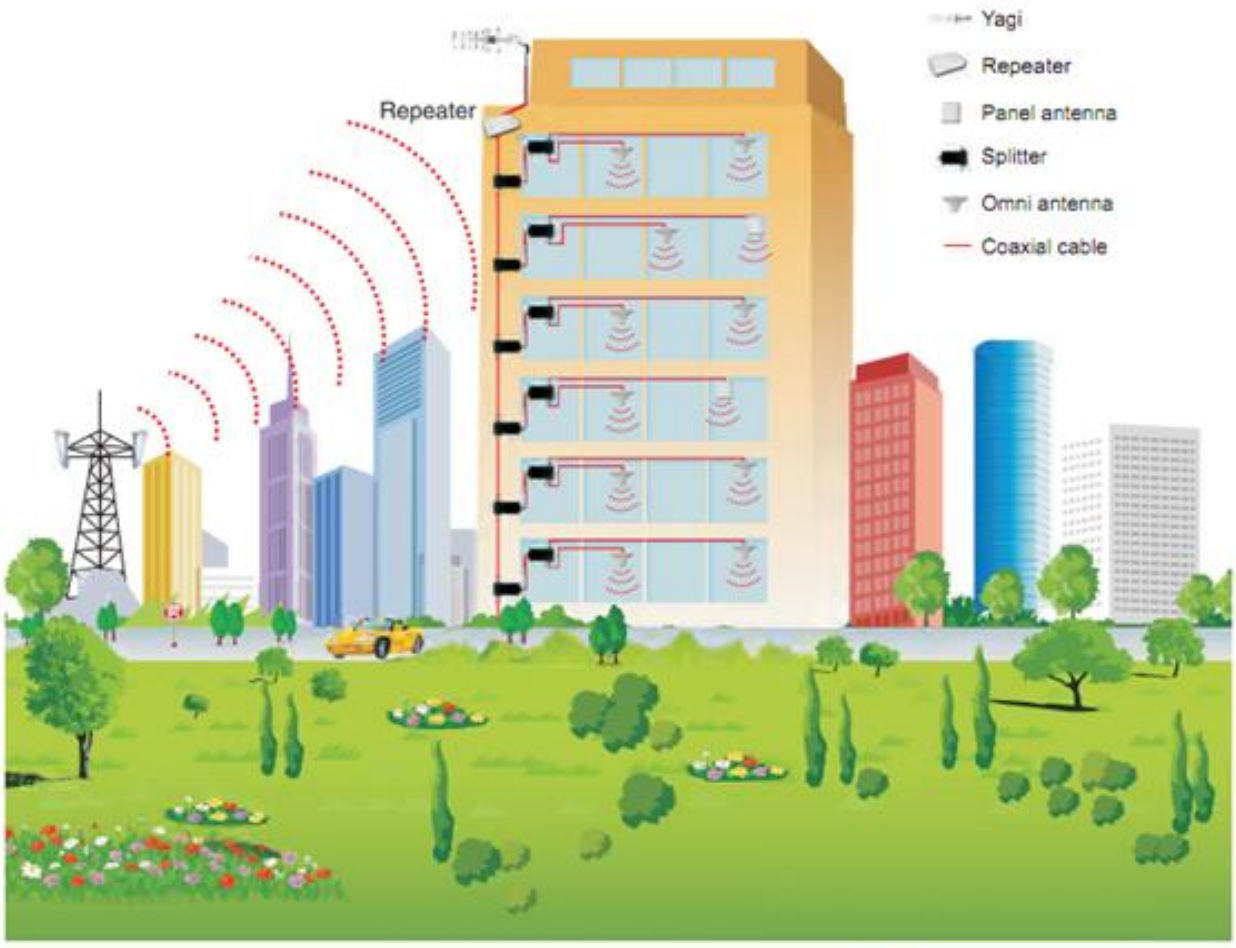
ADD:11169 2F,No 141,Fu-Gang St. Taipei ,Taiwan TEL:+886-2-28828979 FAX:+886-2-28829196 E-mail: sales@tspd.com.tw

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, …



ADD:11169 2F,No 141,Fu-Gang St. Taipei ,Taiwan TEL:+886-2-28828979 FAX:+886-2-28829196 E-mail: sales@tspd.com.tw