Digital LTE1800/2100 37dBm Dual Band Selective RF Repeater

Model: **TS-DRP-DW-90-37**

The RF Repeater (RFR) is designed to provide a more cost-effective solution than adding a new Base Transceiver Station (BTS) to improve signal coverage and communication quality in LTE1800/2100 system. And its easy installation and maintenance can help carrier get fast return.

The repeater is working as a relay between the BTS and mobiles. It receives the low-power signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Coverage Antenna to the weak/blind coverage area. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction.

Features

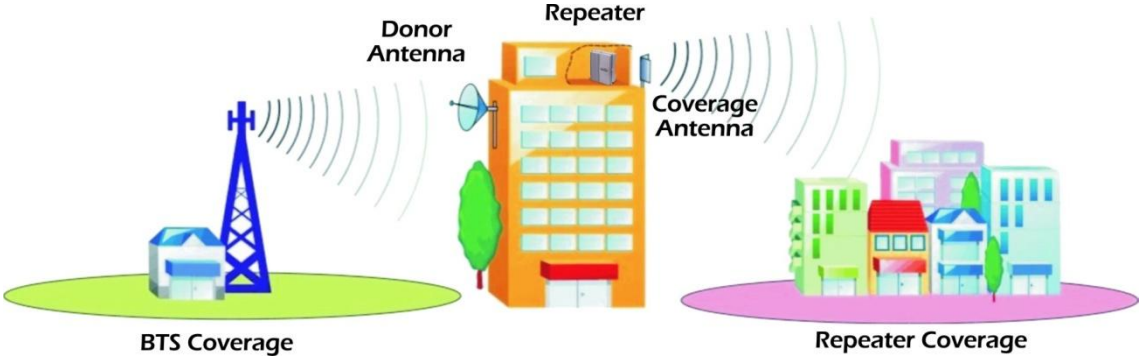
- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corroding
- Low interference to BTS by adopting linear amplifier with high gain and low noise
- Adopting filter with highly selectivity and low insertion loss eliminates interference between uplink and downlink
- USB port provides a link to a notebook for local supervision or to the built-in wireless modem to communicate with the NMS (Network Management System) that can remotely supervise repeater's working status and download operational parameters to the repeater

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, …

Application Diagram



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Tone Spread
Solutions for Wireless Signal

Technical Specifications

Item		Specification	
		Uplink	Downlink
Frequency Range (MHz)	LTE1800 Band	1710 ~ 1785	1805 ~ 1880
	LTE/UMTS2100 Band	1920 ~ 1980	2110 ~ 2170
Bandwidth(MHz)	LTE1800 Band	0.2-10	
	LTE/UMTS2100 Band	5/10(EBW:3.84/8.84)	
Sub band number	LTE1800 Band	7	
	LTE/UMTS2100 Band	7	
Max. Total Output Power(dBm)Center Frequency		23±2	37±2
Max.Gain (dB) Center Frequency at 25℃		85±3	90±3
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)		≤ 8.0	
Input VSWR(Power up, Min Gain, Pin=-30dBm)		≤ 1.8	
Ripple In Band (P-P) (dB)At +25℃	GSM1800 Band	≤±4.0@EBW	
	UMTS2100 Band	≤±4.0@EBW	
Out of Band Rejection (dBc)At +25℃	±600KHz offset	≤-15	
	±1MHz offset	≤-30	
	±5MHz offset	≤-45	
Spurious Emission (dBm) @ Out Of Band 2.5MHz Offset	9kHz~150kHz	≤ -36dBm/1KHz	
	150kHz~30MHz	≤ -36dBm/10KHz	
	30MHz~1GHz	≤ -36dBm/100KHz	
	1GHz~12.75GHz	≤ -30dBm/1MHz	
3rd Inter-modulation (dBc) (Max Gain)		≤ -36 (dual-tone interval 600kHz)	
Time Delay (us)		≤ 5.0	
RF Connector		N(f)	

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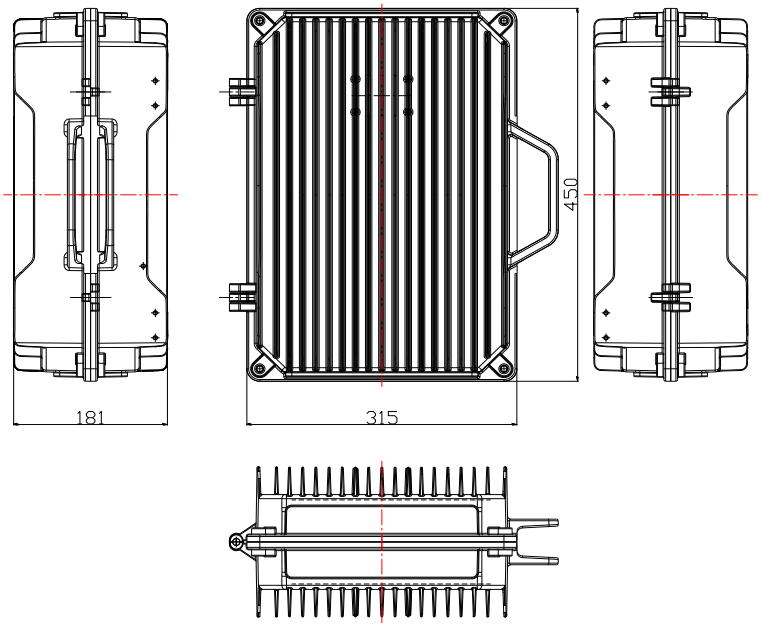
Input / output Impedance (Ω)		50
Power Supply		AC110/220
Temperature Range (℃)		-25 ~ +55
Humidity Range (%)		5~95
Weight (Kg)		≤25
Dimension (mm)		450*315*181
Monitor & Alarm	Local Monitor	USB+RJ45
	Remote Monitor	SMS(GSM Modem) **Optional**

Outline Dimension:



Picture:

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