

# Digital RF Repeater\_Triple-Band



900+1800+2100 MHz **JTD-DRP-GDW-90-37** (37dBm)

**JIETONG DIGITAL**

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## LTE900+LTE1800+LTE/UMTS2100

The Digital RF Repeater provides an affordable solution to solve the indoor signal coverage problems due to signal fading and attenuation caused by architecture obstacles. 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 picks up the strongest signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Indoor Signal Distribution System to the weak/blind coverage area. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction.

## 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**



# Specifications

## Technical characteristics

Item		Specification	
		Uplink	Downlink
Frequency Range (MHz)	LTE 900 Band	885 ~ 915	930 ~ 960
	LTE 1800 Band	1710 ~ 1775	1805 ~ 1870
	LTE /UMTS 2100 Band	1920 ~ 1980	2110 ~ 2170
Bandwidth(MHz)	LTE 900 Band	0.2-20	
	LTE 1800 Band	0.2-20	
	LTE /UMTS 2100 Band	0.2-20	
Sub band number	LTE 900 Band	3	
	LTE 1800 Band	3	
	LTE /UMTS 2100 Band	3	
Max. Total Output Power(dBm)Center Frequency		23±2	37±2
Max. Gain (dB) Center Frequency at 25°C		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°C	GSM900 Band	≤±3.0@EBW	
	GSM1800 Band	≤±4.0@EBW	
	UMTS2100 Band	≤±4.0@EBW	
Out of Band Rejection (dBc)At +25°C	±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)
Input / output Impedance ( $\Omega$ )		50
Power Supply		AC110-220V/50Hz~60Hz
Temperature Range ( $^{\circ}\text{C}$ )		-25 ~ +55
Humidity Range (%)		5~95
Weight (Kg)		$\leq 40$
Dimension (mm)		489*409*186.5
Monitor & Alarm	Local Monitor	USB
	Remote Monitor	RJ45

## 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, ...

