

# Digital RF Repeater\_Triple-Band



**Tone Spread**  
Solutions for Wireless Signal

**700+900+2100 MHz TS-DRP-LGW-90-37 (37dBm)**

## LTE700+LTE900+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 FDD700 Band	703 ~ 748	758 ~ 803
	LTE FDD900 Band	890 ~ 915	935 ~ 960
	LTE FDD2100 Band	1920 ~ 1980	2110 ~ 2170
Bandwidth(MHz)	LTE FDD700 Band	0.2-20	
	LTE FDD900 Band	0.2-20	
	LTE FDD2100 Band	0.2-20	
Sub band number	LTE FDD700 Band	3	
	LTE FDD900 Band	3	
	LTE FDD2100 Band	3	
Max. Total Output Power(dBm)Center Frequency		27±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)		≤ 10.0	
Input VSWR(Power up, Min Gain, Pin=-30dBm)		≤ 2.0	
Ripple In Band (P-P) (dB)At +25°C	LTE FDD700 Band	705-746M/760-801M: ≤±4.0@EBW; 703-748M/758-803M: ≤±5.5@EBW;	
	LTE FDD900 Band	892-913M/937-958M: ≤±4.0@EBW; 890-915M/935-960M: ≤±5.5@EBW;	
	LTE FDD2100 Band	1922-1978M/2112-2168M: ≤±4.5@EBW; 1920-1980M/2110-2170M: ≤±5.5@EBW;	
Out of Band Rejection (dBc)At +25°C	±600KHz offset	≤-15	
	±1MHz offset	≤-30	
	±5MHz offset	≤-45	
Spurious Emission (dBm) @ Out Of Band 10MHz Offset	9kHz~150kHz	≤ -36dBm/1KHz	
	150kHz~30MHz	≤ -36dBm/10KHz	
	30MHz~1GHz	≤ -15dBm/100KHz	

	1GHz~12.75GHz	$\leq -10\text{dBm}/1\text{MHz}$
EVM (%)		$\leq 8.0$
Time Delay (us)		$\leq 5.0$
RF Connector	BS Port	$N(f)*1$
	MS Port	$N(f)*1$
Input / output Impedance ( $\Omega$ )		50
Power Supply		AC110/220V
Power consumption(W)		$\leq 280$
Temperature Range ( $^{\circ}\text{C}$ )		-25 ~ +55
Humidity Range (%)		5~95
Weight (Kg)		$\leq 35$
Dimension (mm)		489*409*186.5
Installation		Wall Mounting
Indicator Light		Power, RUN, ALARM
Monitor & Alarm	Local Monitor	RJ45
	Remote Monitor	SMS(4G Modem)Option

# 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, ...

