Pico Digital RF Repeater_Quad-Band

700-2700 MHz TS-LGDW-VF16-60-20N36A1 (20dBm)

Tone Spread
Solutions for Wireless Signal

LTE700+LTE900+LTE1800+LTE2100

The Digital Pico 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

- Five signal ports with full duplex design.
- Linear power amplification to effectively suppress inter-modulation and spurious emission.
- Stable and improved signal transmission quality.
- Aluminum-alloy casing with IP55 protection has high resistance to dust, water and corroding.
- Smart Automatic Level Control (ALC) ensures output level stable and adjustable continuously.
- Auto Isolation check between service and donor antennas.
- Smart mode to auto-adjust gain according to the isolation and signal level received by donor site.
- Simple installation.

Advantages

☑ Multi_standards/Multi_operators

☑ Remote control (option)

☑ Digital features:

Balancing operator level

☑ Low consumption

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Specifications

Technical characteristics

MODEL		TS-LGDW-VF16-60-20N36A1	
Items		Specifications	
		Downlink	Uplink
Frequency Range (MHz)	TE700	758～803	703～748
	LTE900	930～960	885～915
	LTE1800	1805～1865	1710～1770
	WCDMA/LTE2100	2110～2165	1920～1975
Operating Bandwidth (MHz) movable and tunable	FDDLTE700	10/15/20 (EBW:9/13.5/18)	
	FDDLTE900	10/15/20 (EBW:9/13.5/18)	
	FDDLTE1800	10/15/20 (EBW:9/13.5/18)	
	WCDMA2100	10/15/20 (EBW:8.84/13.84/18.84)	
Sub-band number	FDDLTE700	2	
	FDDLTE900	2	
	FDDLTE1800	2	
	WCDMA2100	2	
Max. Output Power (dBm) Center Frequency		20±2	20±2
Max. Gain (dB) Center Frequency		60±3	60±3
ATT Adjustable Range/ Step (dB)		0～30/1	
Ripple In Band (dB) at 25℃	LTE	≤5.0@EBW	
	WCDMA	≤3.0@3.84MHz	
ALC Range (dB)		0～20	
ALC Accuracy (dB)		≤ |±2.0|	
AGC Range (dB)		30	
Noise Figure (dB) (Max. Gain)		≤8.0	
Out of Band Emission @offset ±2.5MHz	9kHz~150kHz	≤ -36 @ 1KHz	
	150kHz~30MHz	≤ -36 @ 10KHz	
	30MHz~1GHz	≤ -36 @ 100KHz	
	1GHz~12.75GHz	≤ -30 @ 1MHz	

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3rd Inter-Modulation Attenuation (dBc) (Max Gain)		≤ -36/30KHz (2tone of 600KHz spacing)
Total Processing Delay (us)		≤5.0
Out of Band Gain at 25 ℃(dB)WCDMA Band	2.7MHz≦f_offset＜3.5MHz	⩽ 60
	3.5MHz≦ f_offset＜12.5MHz	⩽ 45
	12.5MHz≦f_offset	⩽ 35
Out of Band Gain at 25 ℃(dB) GSM/DCS/LTE Band	offset±600KHz	⩽55
	offset±1MHz	⩽35
	offset±5MHz	⩽25
Input VSWR (Power up, Min Gain, Pin=-		≤1.5
Frequency Error (ppm)		≤0.05
EVM (Error vector margin)(%)RMS		≤8.0
Impedance (Ω)		50
Radio Connector		N(f)
Power Supply		AC110/220V, 45-60Hz
Housing class		IP55
Weight (Kg)		≤20
Dimension (mm)		355*295*150.6(Note1)
Operating Temperature (℃)		0～+55
Power Consumption(W)		≤120
Humidity(%)		≤85
Control Function	**Local control**	MiNi-USB
Status monitoring (Alarm & signal level)		Power supply, input/output power (UL/DL), isolation, temperature, Power Indicator ,Alarm Indicator

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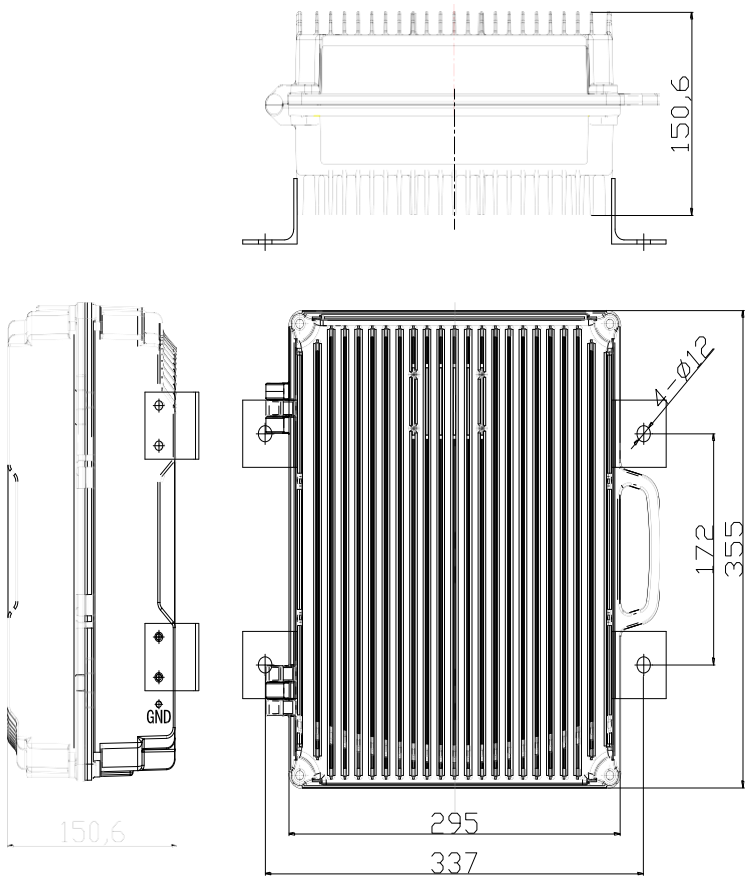
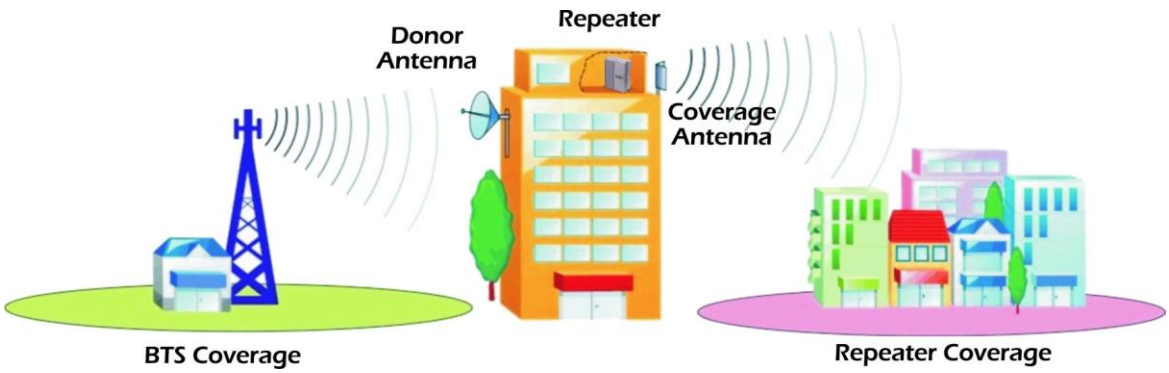
Outline Dimension: Picture:



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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