Pico RF Repeater_Penta Band

700-3500 MHz TS-RP-LGDWN-60-20 (20dBm)

Tone Spread
Solutions for Wireless Signal

LTE700+LTE900+LTE1800+LTE2100+5GNR (TDD-3500)

The 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

➢ Two signal ports with full duplex design.
➢ Linear power amplification to effectively suppress inter-modulation and spurious emission.
➢ Stable and improved signal transmission quality.
➢ Built-in 5G Dynamic TDD Sync Detection Module, automatic completion of 5G wireless network cell search and wireless signaling processing.
➢ 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 with external AC/DC adapter

Advantages

☑ **Multi_standards/Multi_operators**

☑ **Remote control**

☑ **Digital features:**

   **Balancing operator level (Option)**

☑ **Low consumption**

Specifications

Technical characteristics

Item		Specifications
System		LTE700/ LTE900/LTE1800/LTE2100/5GNR (TDD-3500)
Working Frequency	Uplink	703~748/885~915/1710~1775MHz/1920~1980MHz/3300~3570MHz
	Downlink	758~803/930~960/1805~1870MHz/2110~2170MHz/3300~3570MHz
Working Bandwidth		45MHz/30MHz/65MHz/60MHz/270MHz/
Maximum Output Power	Uplink Downlink	20dBm per Band -5dBm per Band
Maximum Gain		60dB
AGC Range		≥ 20dB
MGC Range		0~30dB@Step of 1 dB
VSWR		≤ 1.5
System Delay		≤ 1.5µs
Noise Figure		≤8dB
Spurious Emission		9kHz~1GHz: ≤ -36dBm 1GHz~12.75GHz: ≤ -30dBm
Alarm Monitoring System		Uplink Self-Oscillation, LED Indicator
Isolation Detection		Isolation Check During Boot Time
RF Connector Type		6xN-Female(1PCS BS Port and 5 PCS MS Ports)
I/O Impedance		50Ω
Ingress Protection		Indoor (IP30)
Operating Temperature		-10℃~50℃
Relative Humidity		≤95%
Dimensions		318x265x113mm
Weight		≤11Kg
Power Supply		AC100V ~240V, 50/60Hz
Local Control		Via USB Interface
Remote Mode		IP Connectivity via RJ45 Port(Cloud Network Management System)
Mounting Type		Wall Mounting

※**The configuration of the 5GNR TDD synchronous slots for all operators must be the same.**

Network Management System (NMS)
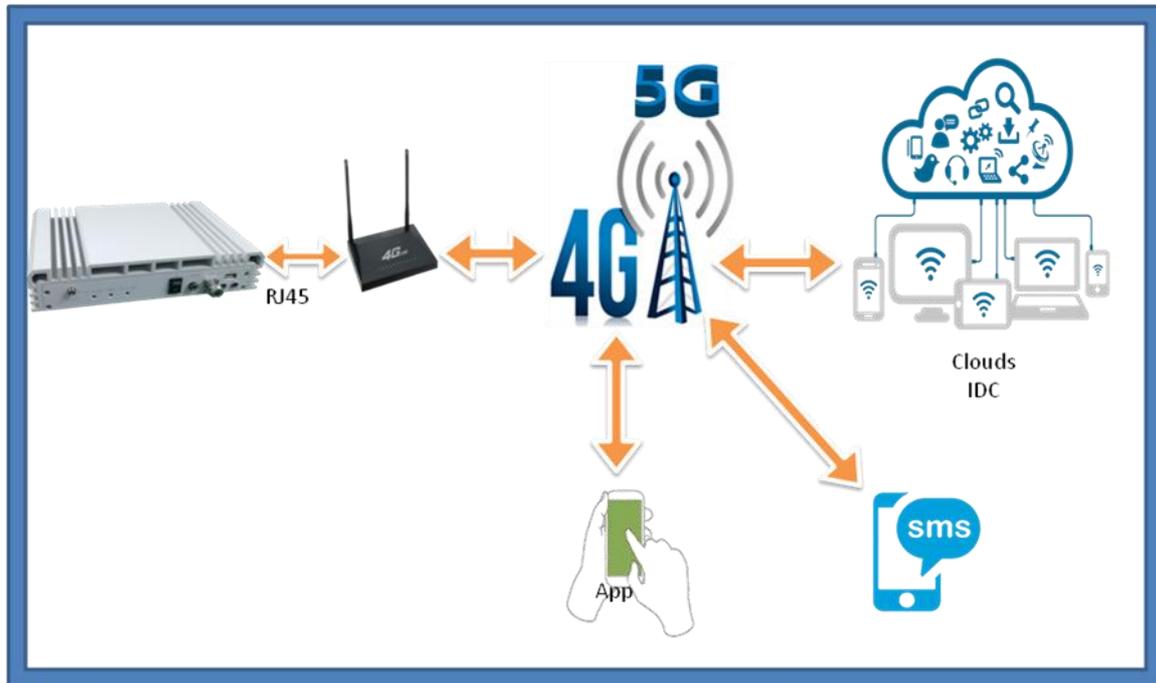
Applications

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, …