Specifications of 900&1800MHz Dual-Band Selective Pico Repeater

Model: ATLA18B2   P/N: 5.11.70.0021

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 re-transmits it via the Indoor Signal Distribution System to the weak/blind coverage area. And the mobile signal is also amplified and transmitted to the BTS via the opposite direction.
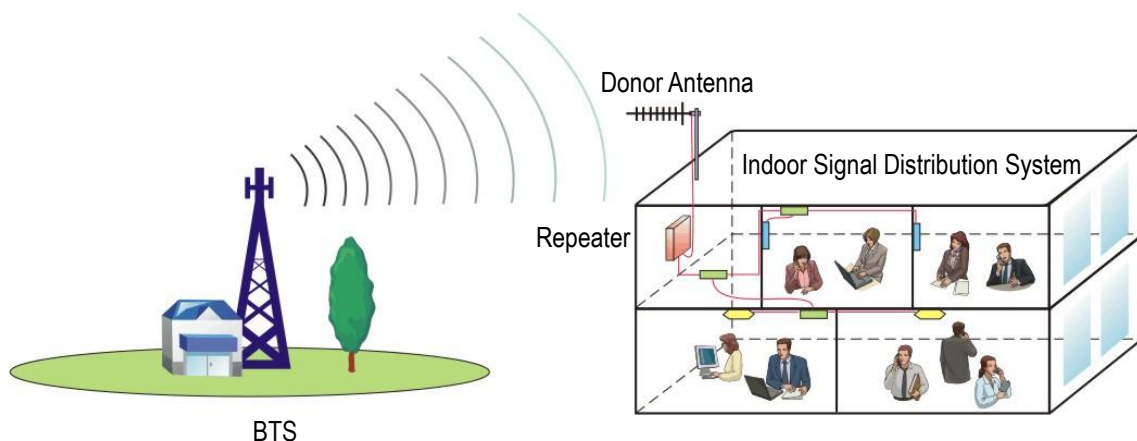
Features

- Two signal ports with full duplex design
- Linear power amplification to effectively suppress inter-modulation and spurious emission
- Smart Automatic Level Control (ALC) to ensure stable and continuously adjustable output level
- 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

Applications

To expand signal coverage or fill signal blind area where signal is weak or unavailable.

Indoor: Hotels, exhibition centers, basements, shopping malls, offices, parking lots, …

Application Diagram

Technical Specifications

Items		Specifications	
System		GSM/UMTS/LTE900	DCS/LTE1800
Frequency Range	Uplink	894.5~904.1MHz	1730~1750MHz
	Downlink	939.5~949.1MHz	1825~1845MHz
Working Bandwidth		9.6MHz	20MHz
Maximum Output Power		≥18dBm	≥18dBm
Maximum Gain		≥70dB	≥70dB
Gain Adjustment Range		≥ 30dB/1dB~2dB Steps	
AGC Range		≥ 20dB	
In Band Ripple		≤ ±3dB	
Noise Figure		≤ 8dB@ Maximum Gain	
System Delay		≤ 5µs	
Spurious Emission		9kHz~1GHz: ≤ -36dBm 1GHz~12.75GHz: ≤-30dBm	
I/O Impedance		50 Ω	
RF Connector		2*N-Female	
Power Supply		Input: AC100~240V	
Dimensions		188*265*68mm	
Weight		≤ 4kg	
Alarm Monitoring System		Alarm for Uplink Self-Oscillation	
Isolation Detection		Isolation Check During Boot Time	
LED Indicator		Power Supply, Alarm, State	
Plug and Play Function		Support	
Operating Temperature		-10~ +45 °C	
Application		Indoor(IP40)	
Relative Humidity Range		≤85%	
Mounting		Wall Mounting	