

Trunk Amplifier Single-Band



Tone Spread
Solutions for Wireless Signal

TDD-4800 MHz

TS-TA-20-37 (37dBm)

5G NR (TDD-4800)

The Single Band Trunk Amplifier is designed to provide a more cost-effective solution than adding a new next generation NodeB (gNB) to extend signal coverage and to improve communication quality in dual system. And its easy installation and maintenance can help carrier get fast return.

The Trunk Amplifier is working as a relay between the gNB and distributed antennas. It receives the low-power RF signal from Small Cell, linearly amplifies the RF signal and then retransmits it via the cables to the antenna distribution system. And the mobile signal is also amplified and retransmitted to the gNB 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.
- Supporting 2x2 MIMO.
- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corrosion.
- USB port provides a link to a notebook for local supervision or IP Based NMS (Network Management System) that can remotely supervise Repeater's working status and download operational parameters to the BDA Via Ethernet.

Advantages

- ☑ **Multi_standards/Multi_operators**
- ☑ **Remote control**
- ☑ **Digital features:**
 - Balancing operator level (Option)**
- ☑ **Low consumption**



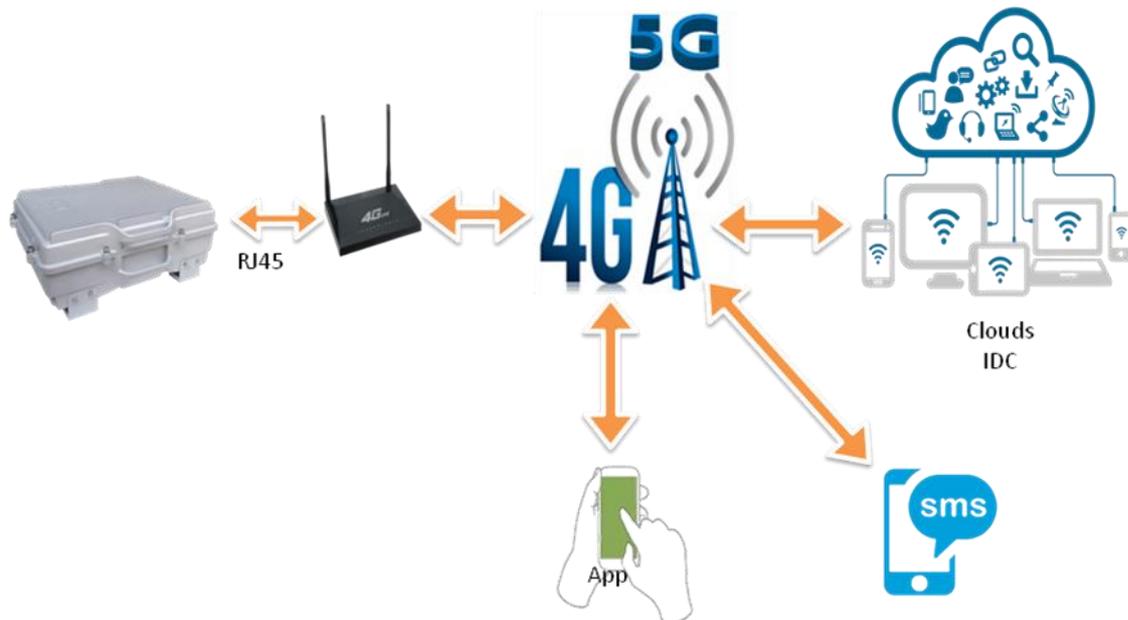
Specifications

Technical characteristics

Item	Specifications	
System	5G NR (TDD-4800)	
Working Frequency	Uplink	4800~4900MHz
	Downlink	4800~4900MHz
Working Bandwidth	100MHz	
Maximum Output Power	Uplink	-40dBm
	Downlink	37dBm
Maximum Gain (DL&UL)	20dB	
AGC Range	≥ 10dB	
MGC Range	0~20dB@Step of 1 dB	
VSWR	≤ 1.5	
System Delay	≤ 1.5μs	
Noise Figure	≤6dB	
Spurious Emission	9kHz~1GHz: ≤ -36dBm	
	1GHz~12.75GHz: ≤ -30dBm	
EVM	≤4.5%	
Maximum Input Power(Non-Destructive)	25dBm	
ACRP	≤-40dBc	
RF Connector Type	2xSMA-Female 2xN-Female	
I/O Impedance	50Ω	
Ingress Protection	Indoor or Outdoor (IP65)	
Operating Temperature	-10°C~55°C	
Relative Humidity	≤95%	
Dimensions	370x295x170mm	
Weight	≤15Kg	
Power Supply	AC100V ~240V, 50/60Hz, ≤50W	
Local Control	Via USB Interface	
Remote Mode	IP Connectivity via RJ45 Port(Cloud Network Management System)	
Mounting Type	Wall or Pole Mounting	

※The configuration of the 5G NR 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, ...