

TETRA Band Selective BDA



Tone Spread
Solutions for Wireless Signal

480-512 MHz

TS-RP-500-80-37 (37dBm)

TETRA BDA

The Band Selective BDA is designed to provide a more cost-effective solution than adding a new Base Transceiver Station (BTS) to improve signal coverage and communication quality in mobile system. And its easy installation and maintenance can help carrier get fast return.

The BDA is working as a relay between the BTS and mobile terminals. It receives the low-power signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Coverage Antenna to the weak/blind coverage area. And the radio network 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.
- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corrosion.
- Adopting filter with highly selectivity and low insertion loss eliminates interference between uplink and downlink.
- USB port provides a link to a notebook for local supervision or to the built-in wireless modem to communicate with the NMS (Network Management System) that can remotely supervise repeater's working status and download operational parameters to the repeater.

Advantages

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

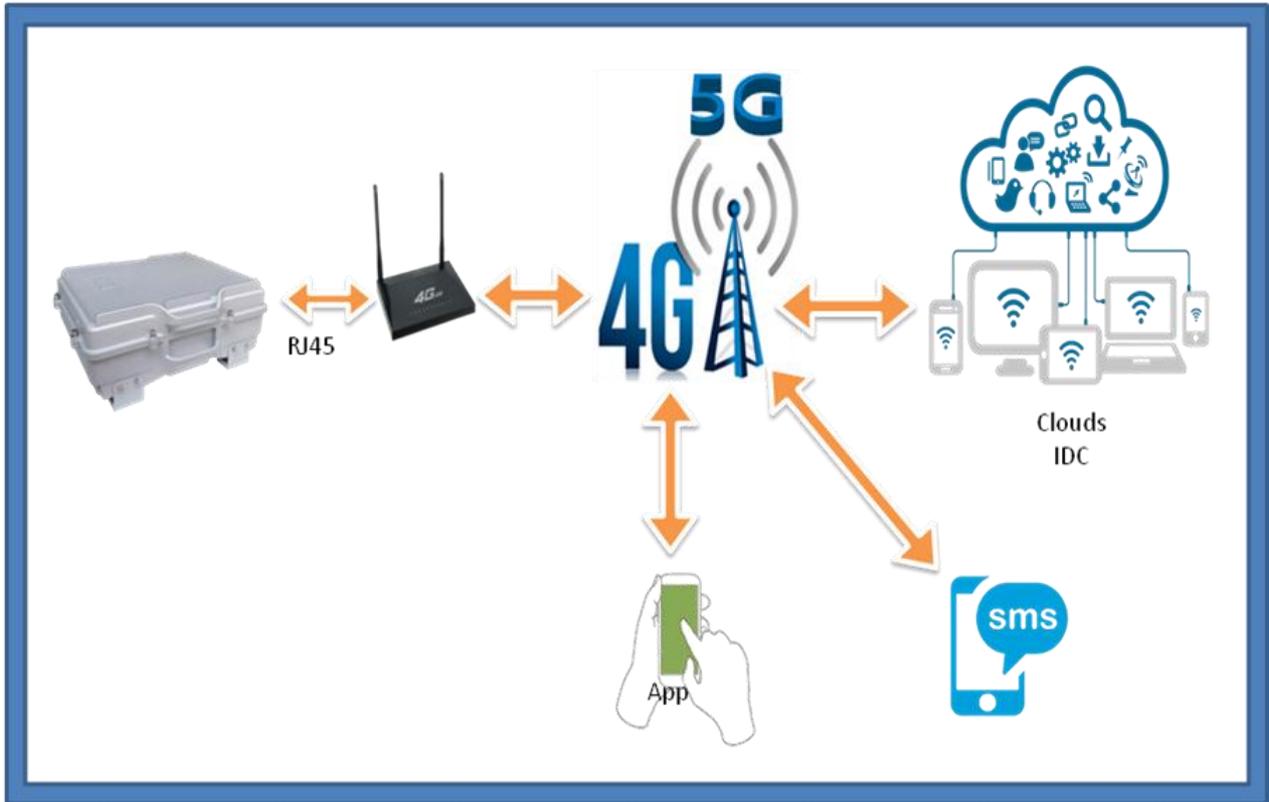


Specifications

Technical characteristics

Items		Specifications
System		TETRA
Working Frequency	Uplink	480~512MHz (Assign frequencies according to NCC assignments)
	Downlink	480~512MHz (Assign frequencies according to NCC assignments)
TX/RX Pass Band		≥5MHz
Maximum Output Power	Uplink	≥ 30dBm@Composite Output Power ≥ 27dBm@2ch(Carriers) ≥ 24dBm@4ch(Carriers)
	Downlink	≥ 37dBm@ Composite Output Power ≥ 33dBm@2ch(Carriers) ≥ 30dBm@4ch(Carriers)
Maximum Gain	Uplink	≥80dB
	Downlink	≥80dB
Manual Gain Adjustment Range		≥ 25dB@Step of 1dB
ALC/AGC		Support
In-Band Ripple		≤ ±3dB
VSWR		≤ 1.5
Noise Figure		≤ 9dB
Third-Order Inter-Modulation		≤ -45dBc
Spurious Emission		≤ -13dBm
System Delay		≤ 5μs
Output/Input Resistance		50 Ω
RF Connector		2XN-Female or 7/16 DIN
Power Supply		AC100~ 240V, 50/60Hz or DC48V
Dimensions		447mm X 357mm X 171mm
Weight		≤ 16kg
Mounting		Wall Mounting
Operating Temperature		-25 ~ +55 °C
Application		Indoor or Outdoor(IP65)
Relative Humidity Range		≤95%(Non Condensing)
Local Control		Via USB Interface and Wi-Fi Hotspot
Remote Mode(Optional)		Cloud NMS via 4G Wireless Modem or RJ45 Port

Network Management System (NMS)



Applications

To expand signal coverage or enhance signal blind area where radio network signal is weak or unavailable.

- Public Safety
- Transportation
- Utilities
- Government
- PAMR
- Commercial & Industry
- Military
- Oil & Gas

