



## UHF / TETRA BDA CSG-9440-BDA90-40X

CSG UHF / TETRA BDA is designed to provide a more cost-effective solution for indoor coverage of signal enhancement to provide good connectivity with radio users (Portable).

The BDA works as repeater between the Base station and mobiles. It receives the low-power signal from Base station via the Donor Antenna or through Transmission line, it further amplifies the signal and then retransmits it via the Coverage Antenna to the weak/blind spots. On the reverse path signals from mobile radios is also amplified and retransmitted to the Base station .

The band-selective function amplifies all signals in the entire band (bandwidth is customized).



### Features

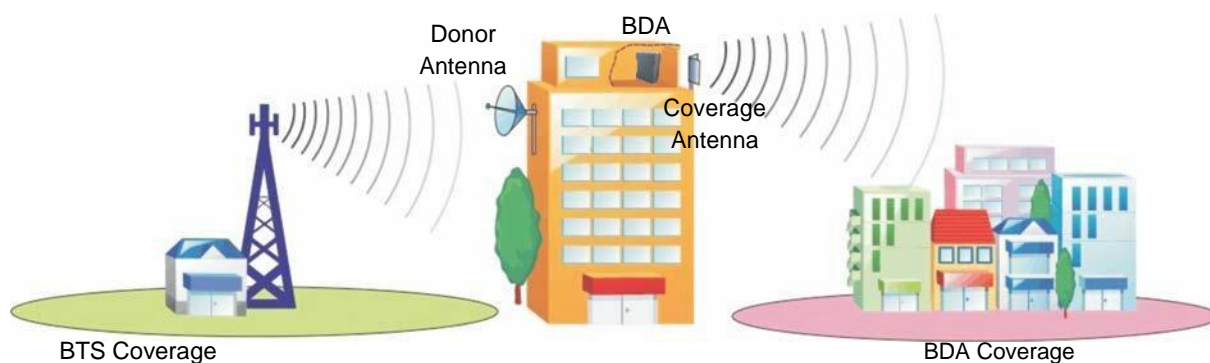
- Aluminum-alloy casing with IP65 protection has high resistance to dust, water and corroding
- No interference to BTS by adopting linear amplifier with high gain and low noise
- Adopting filter with highly selective and low insertion loss eliminates interference between Uplink and Downlink
- USB port 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 BDA's working status and download operational parameters to the BDA

### Applications

To expand signal coverage or enhance signal blind area where UHF / TETRA signal is weak or not present.

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

## Application Diagram



## Technical Specifications

Items		Specifications	
Frequency Range(Customized)	Uplink		Downlink
	443~444.5 MHz		438~439.5 MHz
Maximum Output Power(Customized)	30dBm		40dBm
Maximum Gain	90dB±2dB		90dB±2dB
Bandwidth	1.5 MHz		
In-band flatness	≤3dB		
Auto Level Control (ALC)	≤2dB		
Noise Figure	≤ 5dB		
Gain Adjustment Range	1~31 dB @ step of 1 dB		
VSWR	≤1.5		
Phase P-P error	≤20		
RMS phase error	≤5		
System Delay	≤5.0 us		
Spurious Emission	In-Band	≤-22dBm/30KHz	
	Out-Band	9KHz-1GHz	≤-36dBm/30KHz
		1GHz	≤-30dBm/30KHz
Third-order Inter-Modulation	In-Band	≤ -45dBc / 30kHz ≤ -40dBc / 30kHz	
		9KHz~1GHz: ≤-36dBm/30KHz	
	Out-Band	1GHz~12.75GHz: ≤-36dBm/30KHz	
Output/input resistance	50 Ω		
RF Connector	N-Type (Female)		
Working temperature	-25°C ~+55°C		
Relative humidity	5~95% RH		
Power Supply (customized)	AC220V,50/60Hz		
Dimensions	428mm X 328mm X 220mm		

<b>Weight</b>	30kg
<b>Backup Power Supply (optional)</b>	4 hours
<b>Casing Level</b>	IP65
<b>NMS Monitoring Parameters (optional)</b>	UL/DL Power, UL/DL Max Gain, RSSI, ATT, Channel No, UL/DL Output ALC, Power alarm Threshold, UL/DL PA Temperature etc
<b>NMS Controlled Parameters (optional)</b>	Channel No., ATT, Output Power Thresholds UL/DL, UL/DL Output ALC , PA Switch ,Alarm Report can be enable /disable etc