



## **TETRA / UHF Band Selective BDA / Repeater**

### **CSG-9450BDA-80-21**

CSG UHF / TETRA Repeater provides an affordable solution to solve the indoor signal coverage problems due to signal fading and attenuation . It strengthens the signal strength for indoor coverage

its easy installation and maintenance can help carrier get fast return.

The repeater works as a relay between the BTS, Donor ( Input ) and mobile Radios . It receives the DOWNLINK 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. In the reverse path the signal from the mobile radio is also amplified and retransmitted to the BTS via the opposite direction.( known as UPLINK )



CSG BDAs / Repeaters are designed to operate within the customized band as Band selective or in Channel Selective configuration

#### **Features**

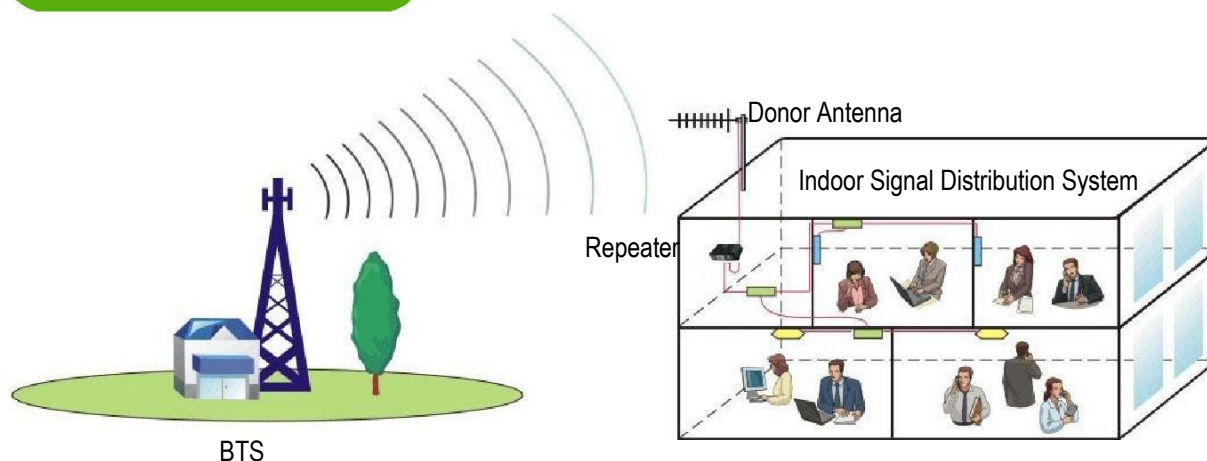
- Two signal ports with full duplex design
- High system gain of 80 dB
- Linear power amplification ( upto 30dBm in the cabinet size ) to effectively suppress inter-modulation and spurious emission
- Smart Automatic Level Control (ALC) ensures output level is stable and is continuously adjustable
- Unique color LEDs to indicate power supply and state and alarm
- Simple installation with external AC/DC adapter

#### **Applications**

To extend signal coverage or to enhance radio signals in blind areas where TETRA / UHF signal is weak or unavailable.

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

## Application Diagram



PARAMETERS		SPECIFICATIONS
Frequency range	Uplink	450 ~ 455 MHz
	Downlink	460 ~ 465 MHz
Gain	Uplink	80±2 dB
	Downlink	80±2 dB
Gain Adjustable range		≥ 30 dB
Output Power	Uplink	21 dBm (15 dBm per carrier@up to 4 carriers)
	Downlink	21 dBm (15 dBm per carrier@up to 4 carriers)
AGC control range		≥ 25 dB
In-Band Ripple		≤ 3 dB
VSWR		≤ 1.5 : 1
Group delay time		≤ 5μs
I/O Impedance		50 Ω
Third-order Inter-Modulation		max.-40dBc @ 30kHz
Noise Figure		≤ 6 dB
Spurious Emission	Within Working band	≤-15 dBm / 30KHz
	Out of working band ( Δf >2.5 MHz)	9KHz ~ 1GHz ≤-36dBm/30KHz 1GHz ~ 12.75 GHz ≤-30dBm/30KHz
RF Connectors		N - Female
Power Supply		AC 100 ~ 240 VAC
Dimensions (Approx.)		191 x 296 x 76 mm
Weight (Approx.)		2.5 Kg
Alarm monitoring system		Optional
MTBF		>50,000 Hours
Indications		Power supply , Alarm, State
Operating temperature		-10 to 50 °C
Humidity		≤ 95 %