

GSM(2G)&WCDMA(3G) DualBand Repeater

CSG RPTR 99002100-70-21

CSG Dual Band Repeater solves the indoor signal coverage problems by boosting the signal strength. 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). Its easy to install and maintain.

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



Features

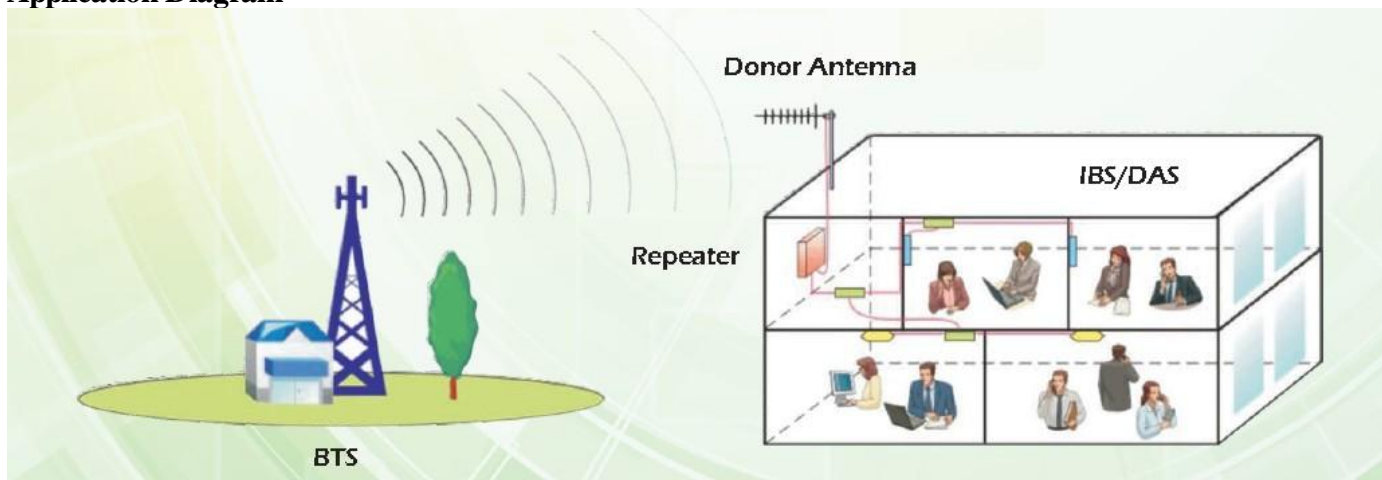
- Two signal ports with full duplex design
- High system gain
- Linear power amplification suppresses inter-modulation and spurious emission
- Automatic Level Control (ALC) ensures output level is stable and is continuously adjustable
- Unique color LEDs to indicate power supply and signal levels of UPLINK and DOWNLINK
- Simple Installation with external AC/DC Adaptor

Applications

To enhance and expand signal coverage where GSM (2G) & WCDMA (3G) signals are weak or unavailable.

- Hotels
- Exhibition Centers
- Basements
- Shopping Malls
- Offices
- Parking lots
- Fringe Areas

Application Diagram



Technical Specifications :

PARAMETERS		SPECIFICATIONS	
System		GSM 900	WCDMA 2100
Frequency range	Uplink	890 – 915 MHz	1920 – 1980 MHz
	Downlink	935 – 960 MHz	2110 – 2170 MHz
Gain		≥ 70 dB	
Maximum Output Power		21 dBm	
AGC control range		≥ 20 dB	
Maximum Input Power(Non-destructive)		≤ 0 dBm	
VSWR		$\leq 2.0 : 1$	
System Delay		≤ 1.5 μ s	
I/O Impedance		50 Ω	
Noise Figure		≤ 6 dB	
Spurious Emission		9KHz ~ 1GHz \leq -36dBm	
		1GHz ~ 12.75 GHz \leq -30dBm	
ACRR	P \leq 31 dBm	-----	Offset 5MHz \geq 20dB
	P \leq 31 dBm	-----	Offset 10MHz \geq 20dB
Peak Code Domain Error (PCDE)		-----	\leq -35dBm
Error Vector Magnitude (EVM)		-----	$\leq 12.5\%$
RF Connectors		N - Female	
Power Consumption		≤ 50 W	
Power Supply		AC 100 ~ 240 V Output : 9V/10A	
Dimensions (Approx.)		265 x 318 x 68 mm	
Weight (Approx.)		7.5 Kg	
Alarm monitoring system		Alarm for uplink self-oscillation	
Indications		Power supply , Alarm, State	
Operating temperature		-25°C to $+55^{\circ}\text{C}$	
Humidity		≤ 95 %	