

## Mini Repeater

GRT933 (CDMA 800MHz Band A) / GRT93C (CDMA 800MHz Band B) / GRT833 (GSM 850MHz) / GRT8B3 (E-GSM) / GRT863 (GSM 900MHz) / GRT883 (GSM 1800MHz) / GRT893 (GSM 1900MHz) / GRT653 (WCDMA)

Our Mini Repeater provides an affordable solution to solve the indoor coverage problems due to signal fading and attenuation caused by architecture obstacles.

It is mainly deployed for small points of in-building wireless signal coverage, when installation of standard repeaters will generate great interference to the wireless network or the area to be covered is widely distributed. Its easy installation and maintenance can help carrier get fast return.

The Mini Repeater works as a relay between the BTS and mobiles. It picks up the strongest signal from the 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 mobile signal is also amplified and retransmitted to the BTS via the opposite direction.



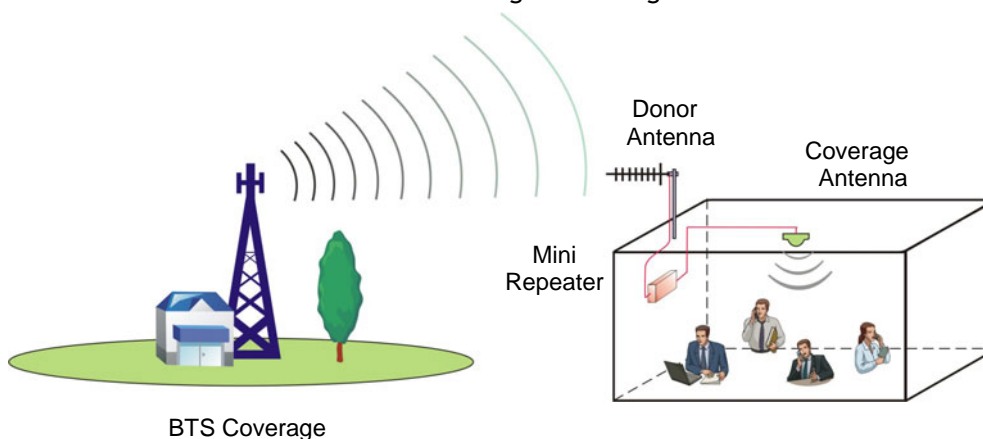
### FEATURES

- Super-compact size with light weight to facilitate wall-mount installation;
- Low power consumption and no interference to BTS;
- Smart Automatic Level Control (ALC) ensures output level stable and adjustable continuously;
- Unique color LEDs to indicate power supply and signal level of uplink and downlink;
- Linear power amplification to effectively suppress intermodulation and spurious emission;
- “Plug & Play” - basically no needs for configuration and free of maintenance.

### APPLICATIONS

To expand signal coverage or fill signal blind area where signal is weak or unavailable.

- Small blind area or weak-signal area, e.g. underground or semi-underground rooms, small basements, underground parking lots;
- Small zones with hot traffic: meeting rooms, supermarkets, offices, pubs, coffee shops, gyms...
- Elevators (especially when cabling in the elevator shaft is difficult);
- Private homes or villas at outskirts with bad signal coverage.



## TECHNICAL SPECIFICATIONS

Items		Specifications	
Working Frequency	Uplink	GSM850: 824-849MHz E-GSM: 880-915MHz GSM1900: 1895-1910MHz CDMA800B: 835-845MHz	GSM900: 890-915MHz GSM1800: 1710-1785MHz CDMA800A: 825-835MHz WCDMA: 1920-1980 MHz
	Downlink	GSM850: 869-894MHz E-GSM: 925-960MHz GSM1900: 1975-1990MHz CDMA800B: 880-890MHz	GSM900: 935-960MHz GSM1800: 1805-1880MHz CDMA800A: 870-880MHz WCDMA: 2110-2170 MHz
Gain	Uplink: $\geq 70$ dB; Downlink: $\geq 75$ dB		
Gain Adjustment Range	$\geq 30$ dB		
Output Power	0.2W (23dBm) / 0.5W (27dBm) / 1W (30dBm)		
In-Band Ripple	$\leq 4$ dB p-p		
I/O Impedance	50 $\Omega$		
Spurious Emission	Within working band	$\leq -15$ dBm/30kHz	
	Out of working band ( $\Delta f > 2.5$ MHz)	9kHz-1GHz: $\leq -36$ dBm/30kHz 1GHz-12.75GHz: $\leq -30$ dBm/30kHz	
Voltage Standing Wave Ratio (VSWR)	$\leq 1.5$		
Noise Figure	$\leq 8$ dB		
Intermodulation Attenuation	$\leq -40$ dBc		
System Delay	$\leq 1.5\mu$ Sec		
RF Connector	N-Type (Female)		
Operating Temperature	$-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$		
Power Supply	AC 110-220V $\pm 10\%$ , 45-55Hz		
Dimensions	322mm X 233mm X 60mm		
Weight	9kg		
Electromagnetism Compatibility	Compliance with ETS300 694-4 Standard		
Indication LED	Power supply, Rx signal level, Tx signal level		
Remote Monitoring/Control via NMS	Not Supported		
ALC (automatic level control)	Supported		
Accessories Included in Package	Mounting brackets, AC/DC adaptor, and user manual		
Optional Accessories	Jumper cable, donor antenna (yagi antenna), coverage antenna (ceiling-mount omni antenna), cable tie, waterproof tape, and electrical tape		

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