Repeaters system is designed to solve problems of weak mobile signal, which is much cheaper than adding a new Base Station (BTS). Main operation of RF Repeaters system is to receive low - power signal from BTS via radio frequency transmission and then transmit the amplified signal to the areas where network coverage is inadequate. And the mobile signal is also amplified and transmitted to the BTS via the opposite direction.

Main Features

- High linearity PA; High system gain;
- Intelligent ALC technology;
- Full duplex and high isolation from uplink to downlink;
- Automatic Operation convenient operation;
- Integrated technique with reliable performance;
- Local and remote monitoring (optional) with automatic fault alarm &remote control;
- Weatherproof design for all-weather installation;

Applications

Expand signal coverage of fill signal blind area where signal is weak or unavailable.

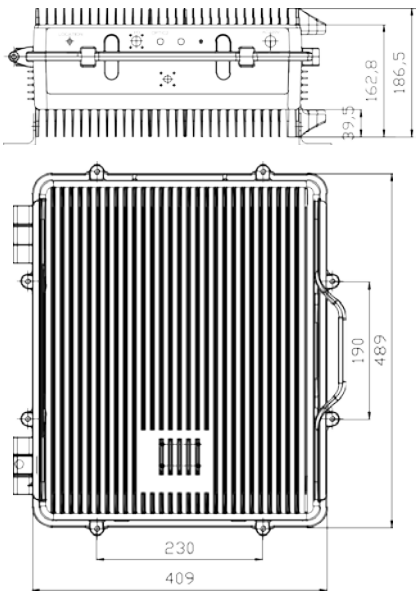
Outdoor: Airports, Tourism Regions, Golf Courses, Tunnels, Factories, Mining Districts, Villages etc.

Indoor: Hotels, Exhibition Centers, Basements, Shopping Malls, Offices, Packing Lots etc.

It is mainly applicable to such case:

The repeater can find an installation place which can receive pure BTS signal at strong enough level as the Rx Level in repeater site should be more than -70dBm;

And can meet the requirement of antenna isolation to avoid self - oscillation.



* MCC reserves the right to make the changes conridered necessary in this document.

Specifications:

Items		Specifications	
		Uplink	Downlink
Frequency Range	900MHz	880–915MHz	925–960MHz
	1800MHz	1710–1785MHz	1805–1880MHz
	2100MHz	1920–1980MHz	2110–2170MHz
Operating Bandwidth Band Adjustable	900MHz	one 0.2-10 MHz, one 5-20 MHz tunable	
	1800MHz	5-20 MHz tunable	
	2100MHz	5-20 MHz tunable	
Number of sub-band	900MHz	2	
	1800MHz	2	
	2100MHz	2	
Max. Output Power (dBm)	900MHz	27±2	37±2
	1800MHz	30±2	40±2
	2100MHz	30±2	40±2
Max. Gain (dB)		80±3	90±3
ATT Adjustable Range/ Step (dB)		0 ~ 30/1	
Ripple In Band (dB)at 25℃	GSM	≤6	
	LTE	≤8@EBW	
	UMTS	≤8@EBW	
ALC Range (dB)		0 ~ 20	
ALC Accuracy (dB)		≤ |±2.0|	
Out of Band Emission @offset	9KHz~150KHz	≤ -36 @ 1KHz	
	150KHz~30MHz	≤ -36 @ 10KHz	
	30MHz~1GHz	≤ -36 @ 100KHz	
	1GHz~12.75GHz	≤ -30 @ 1MHz	
3rd Inter-Modulation Attenuation (dBc) (Max Gain)		≤ -42/30KHz (2 tone of 600KHz spacing)	
Noise Figure (dB) (Max. Gain)		≤8.0	
Total Processing Delay (us)		≤5.0	
Input VSWR (Power up, Min Gain, Pin=-30dBm)		≤1.8	
Out of Band Gain at 25℃(dB)WCDMA Band	2.7MHz≦f_offset＜3.5MHz	≤ 60	
	3.5MHz≦ f_offset＜12.5MHz	≤ 45	
	12.5MHz≦ f_offset	≤ 35	
Out of Band Gain at 25℃(dB) GSM/LTE Band	offset±600KHz	≤65	
	offset±1MHz	≤40	
	offset±5MHz	≤30	
Frequency Error (ppm)		≤0.05	
EVM (Error vector margin)(%)RMS		≤10.0	
Impedance (Ω)		50	
Radio Connector		N-Female*2	
Power Supply		AC220V, 45-55Hz,(BS)	

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Housing class	IP54
Weight (Kg)	≤35
Dimension (mm)	489*409*186.5
Operating Temperature (℃)	-25 ~ +55
Power Consumption(W)	500
Humidity (%)	≤85
Local control Function	Micro-USB(built in)
Remote monitoring	SMS(GSM-Modem）
Status monitoring (Alarm & signal level)	input/output power (UL/DL), temperature