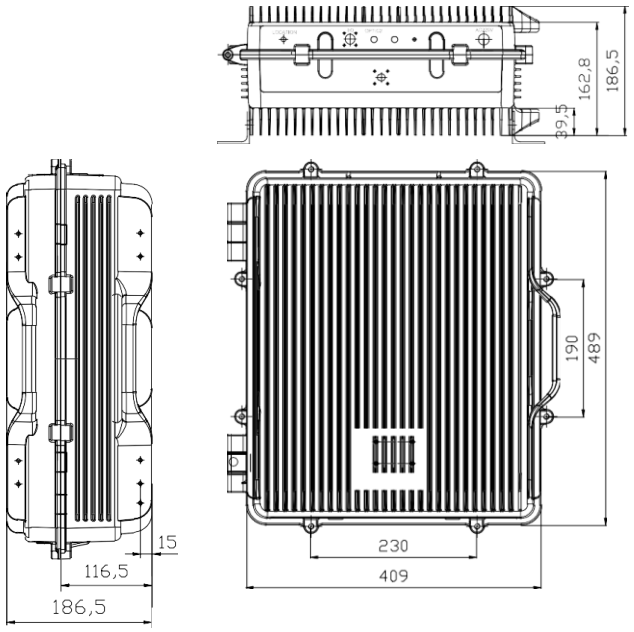
Repeaters system is designed to solve problems of weak mobile signal, which is much cheaper than adding a new Base Station (BTS). Main operation of RF Repeaters system is to receive low - power signal from BTS via radio frequency transmission and then transmit the amplified signal to the areas where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

Item		Specification	
		Uplink	Downlink
Frequency Range (MHz)	LTE FDD1800 Band	1710 ~ 1775	1805 ~ 1870
	LTE FDD2100 Band	1920 ~ 1980	2110 ~ 2170
	NR3500(TDD) Band	3300 ~ 3570	3300 ~ 3570
Bandwidth(MHz)	LTE FDD1800 Band	65	
	LTE FDD2100 Band	60	
	NR3500(TDD) Band	270	
Max. Total Output Power(dBm)Center Frequency		30±2	37±2
Max. Gain (dB) Center Frequency at 25℃		80±3	85±3
ATT Adjustable Range (dB)/(Step) 1dB		0~31 @ 1 dB step	
ATT Adjustable Error (dB)		≤ |±1.5|	≤ |±1.5|
ALC (dB)		0~20	
Noise Figure (dB) (Max. Gain)		≤ 6.0	
Input VSWR(Power up, Min Gain, Pin=-30dBm)		≤ 1.5	
Ripple In Band (P-P) (dB) At +25℃	LTE FDD1800 Band	≤5.0@20MHz	
	LTE FDD2100 Band	≤5.0@20MHz	
	NR3500(TDD) Band	≤5.0@50MHz	
Out of Band Rejection (dBc)At +25℃ @L1800 Band	±10MHz offset	≤-15	
	±13MHz offset	≤-30	
	±17MHz offset	≤-45	
Out of Band Rejection (dBc)At +25℃ @L2100 Band	±5MHz offset	≤-15	
	±8MHz offset	≤-30	
	±12MHz offset	≤-45	
Spurious Emission (dBm) @ Out Of Band 10MHz Offset	9kHz~150kHz	≤ -36dBm/1KHz	
	150kHz~30MHz	≤ -36dBm/10KHz	
	30MHz~1GHz	≤ -36dBm/100KHz	
	1GHz~12.75GHz	≤ -10dBm/1MHz	
EVM (%)RMS		≤ 8.0	
Frequency Error (ppm)		≤±0.05	

Time Delay (us)		≤ 1.5
RF Connector		N-Female
Input / output Impedance (Ω)		50
Power Supply		AC176-264V/50Hz
Temperature Range (℃)		-25 ~ +55
Humidity Range (%)		5~95
Dimension (mm)		489*409*186.5
Weight (Kg)		≤35
Monitor & Alarm	Local Monitor	RJ45
	Remote Monitor	SMS(4G Modem) (option)