

### Overview:

With the development of mobile communication technology, more and more new communication technologies (like 4G LTE) will be adopted nowadays. Telecom operators have to handle Triple-system simultaneity and have to face the problem of re-farming spectrum resource for future. For Traditional Triple Band RF Repeaters, most of the manufacturers adopt all-in-one architecture with huge size. Furthermore, it's impossible to be very easily upgraded in case of frequency re-farming or add new technique in the near future, which will waste operator's old investments. For the above mentioned reasons, **MCC** develops and brings out Digital Triple-Band Repeaters to resolve such problem. It provides software-based platform and enables on-the-fly filter to be changed/updated by software without expensive hardware upgrading.

### Main Features:

- Support multi system 900&1800&2100 is available.
- Support sub-bands; the band width of each sub-band is adjustable; the output power for each band is the same as the repeater
- Independent uplink and downlink gain control and on/off for each sub-band
- MGC and AGC function
- Self-oscillation protection
- Built-in USB interface for local control.
- Low Power Consumption

### Applications:

Expand signal coverage of fill signal blind area where signal is weak or unavailable.  
Indoor: Hotels, Exhibition Centers, Basements, Shopping Malls, Offices, Packing Lots etc.  
It is mainly applicable to such case:



**Specification:**

Parameter		Uplink	Downlink
Frequency Range	900MHz	880-915MHz	925-960MHz
	1800MHz	1710-1785MHz	1805-1880MHz
	2100MHz	1920-1980MHz	2110-2170MHz
Operating Bandwidth Variable	900MHz	0.2-30 MHz tunable	
	1800MHz	0.2-30 MHz tunable	
	2100MHz	0.2-30 MHz tunable	
Sub-band number	900MHz	1	
	1800MHz	1	
	2100MHz	1	
Max. Output Power center frequency		15dBm	20dBm
Max. Gain center frequency		65dB	70dB
ATT Adjustable Range		0 - 30dB / 1dB Step	
Ripple In Band (dB)at 25°C		≤±5.0@EBW	
AGC Range		20 dB	
Max. Input power		<-20dBm (for all frequency bands)	
Inter-modulation, IMD3		≤-36dBc	
Noise Figure		≤ 8.0	
System Time Delay		≤ 8.0 us	
Frequency Error		≤ 0.05 %	
EVM		≤ 12.5%	
Impedance		50 Ω	
Radio Connector		N-Female	
Power Supply		195-265 VAC, 50-60Hz	
Housing class		IP30(indoor)	
Weight		≤4 Kg	
Dimension		234*230*52 (mm)	
Operating Temperature)		-10 to +50 °C	
Humidity		≤85 %	
Control Function	Sub band on/off	Each sub-band/Channel can be switched on/off individually by software	
	Status monitoring	in/output power (UL/DL), temperature, Switch, Frequency, Alarm & signal level, Etc.	
	LED Indicator	Power Supply, ALARM, etc.	
	Local control	Mini USB 2.0	

Note: According to the production and the actual needs, the shape structure may change, in order to final production.