

# 2100MHz Digital Band Selective Repeater

mBDA-2133

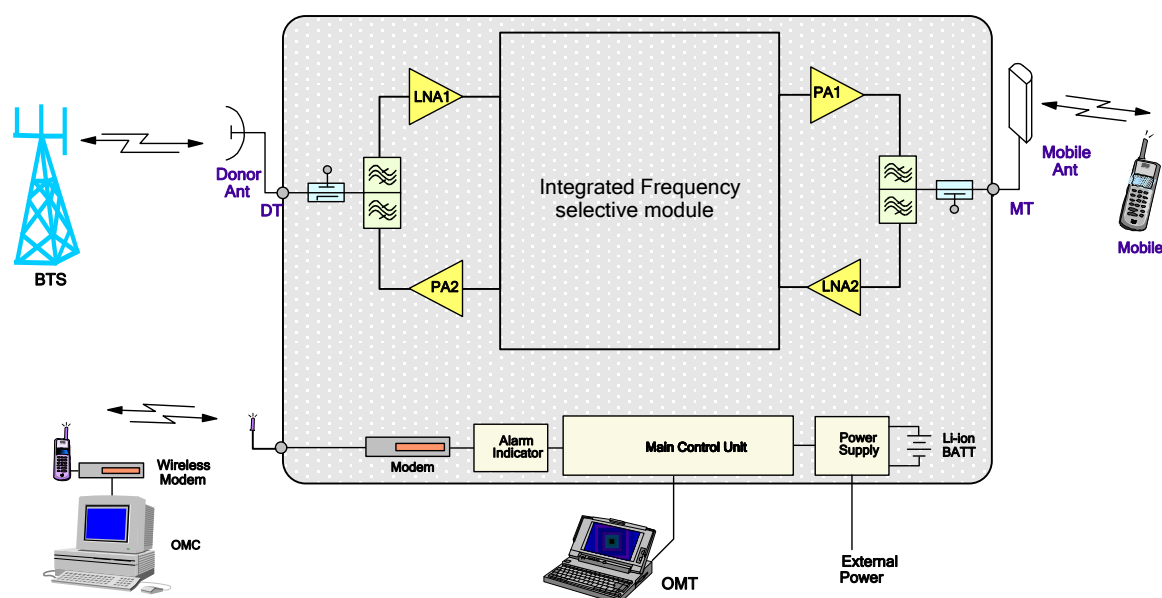
## Features

- Up to 4 pass band segments with independent ON/OFF for maximum flexibility.
- Max. 2W total output power, support WCDMA, LTE, NB-IoT (Stand Alone, Guard Band and In-band) and 5G NR\*, or hybrid application.
- Offline isolation detection for easy commissioning.
- Friendly and easy OMT interface via RJ45 connection.
- Integrated wireless modem for remote monitoring and control.
- Compatible to Comba generic OMT and CMS platform.
- Waterproof, damp-proof and omni-sealed (IP65).



Note: 5G NR will be support by software upgrade at Q2, 2021

## Functional Block Diagram



## Specifications

<b>Electrical</b>		<b>0.5W</b>	<b>1W</b>	<b>2W</b>
Operating Frequency, Uplink	MHz	1920-1980		
Operation Frequency, Downlink	MHz	2110-2170		
Operating Bandwidth Per Sub-band	MHz	0.2-20*		
Number of Sub-bands		4		
Total Output Power, Uplink	dBm	17		
Total Output Power, Downlink	dBm	27	30	33
Maximum System Gain	dB	90		
Attenuation Adjustment Range (1dB step)	dB	0-30		
Pass Band Ripple at 3.84MHz	dB	≤ 2		
Uplink Noise Figure	dB	≤ 5		
System Group Delay	μsec	≤ 6		
Out-of-Band Gain		Compliance with 3GPP TS 25.106 @ WCDMA Compliance with 3GPP TS 36.106 @ LTE		
Intermodulation				
Spurious Emission				
EVM				
ACRR				
PCDE				
Spurious Emission Mask				
Absolute Maximum RF input power	dBm			
Input VSWR		≤ 1.6		
Impedance	Ω	50		
<b>Mechanical</b>				
Dimensions, W x H x D	mm/in	361x222x93 / 14.2x8.7x3.7		
Weight (approx.)	kg/lb	7 / 15.4		
Power Supply	VAC	100 - 240/47 - 63Hz		
Power Consumption (approx.)	W	60		
Enclosure Cooling		Convection		
RF Connectors		N-Female		
Operating Temperature	°C	-33 to +55		
Operating Humidity		≤ 95%		
Environmental Class		IP65		
MTBF	hrs	> 50,000		

Note: Typical specification at room temperature;

\*: WCDMA Max. Bandwidth 20MHz, LTE Max. Bandwidth 20MHz.