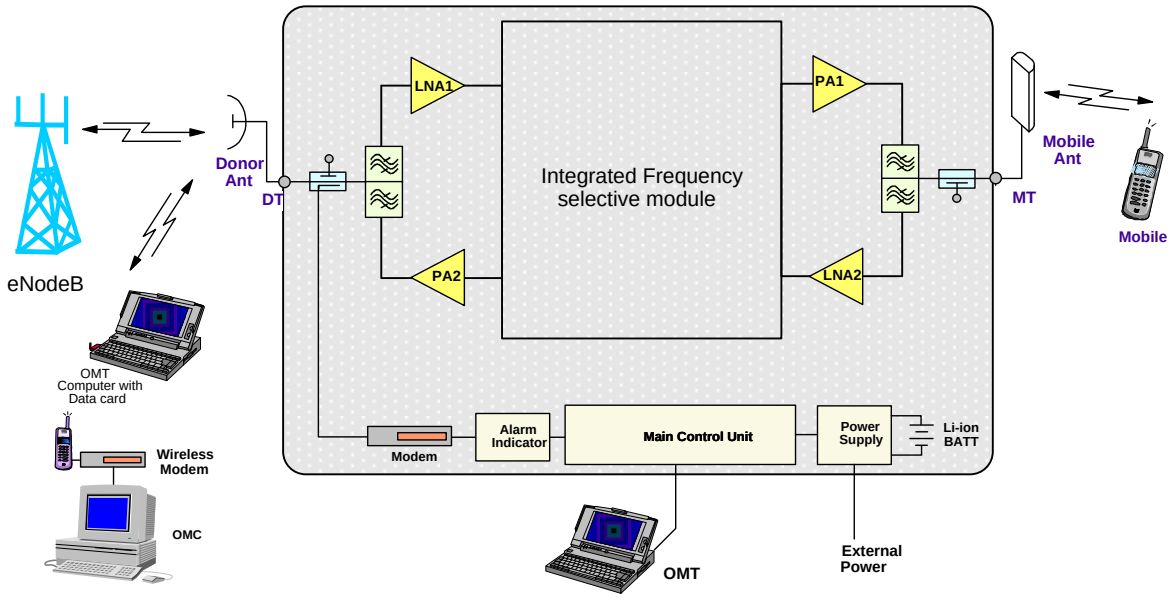
900MHz Digital Band Selective Repeater

RX-9123 V5

Features

- Support different bandwidth WCDMA /LTE carrier
- Utilizing the latest Pre-distortion MCPA technologies, up to20W Downlink Power Output.
- Automatic Digital gain control and Antenna Feedback Cancellation (AFC) feature that can reduce the isolation requirement.
- Integrated wireless modem for remote configuration, monitoring and control.
- Real timeisolation detection for easy commissioning.
- Compatible to Comba generic OMT and CMSplatform.
- Designed for all weather outdoor installation– waterproof, damp-proof and omni-sealed (IP65).

Functional Block Diagram



Specifications-Preliminary

Electrical				
Frequency Range, Uplink	MHz	880-915		
Frequency Range, Downlink	MHz	925-960		
Operating Bandwidth (Adjustable)	MHz	0.2-20		
Number of Sub-bands		2		
Instantaneous bandwidth	MHz	35		
Total Output Power, Uplink	dBm	27		
Total Output Power, Downlink	dBm	37	40	43
Maximum System Gain	dB	95		
Gain Adjustment Range (1dB step)	dB	0-30, support AGC		
Antenna Feedback Cancellation	dB	Gain - 5		
Uplink Noise Figure	dB	≤5		
System Group Delay	μsec	≤10		
Spectrum Emission Mask		Compliance with 3GPP TS 36.106		
ACRR				
EVM				
PCDE				
Intermodulation				
Absolute Maximum RF Input Power	dBm	+10		
Input VSWR		≤ 1.5		
Impedance	Ω	50		
Mechanical				
Dimensions, H x W x D	mm	500 x 356 x 140		
Weight(approx.)	kg	18		
Power Supply	VAC	100-240/47-63Hz		
Power Consumption(approx.)	W	85	95	130
MCU Battery Backup Time(approx.)	hr	2		
Enclosure Cooling		Convection		
RF Connectors		4.3-10		
Operating Temperature	°C	-33 to +55		
Operating Humidity		≤ 95%		
Environmental Class		IP65		
MTBF	hr	≥50,000		

Note: Typical specification at room temperature

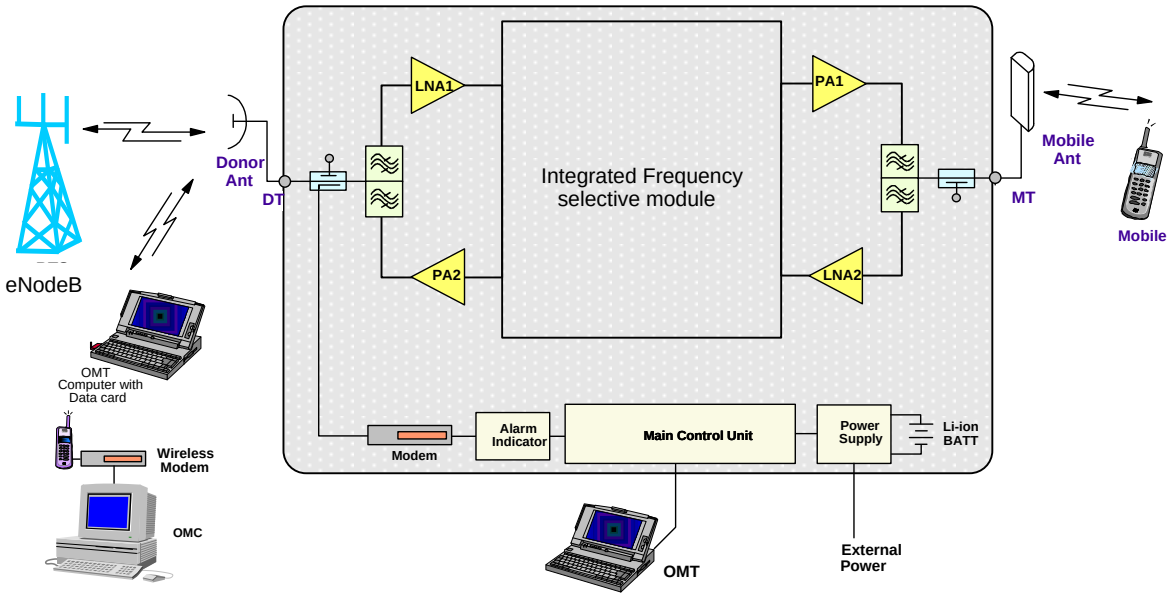
1800MHz Digital Band Selective Repeater

RX-1823 III3

Features

- Support different bandwidth WCDMA /LTE carrier.
- Utilizing the latest Pre-distortion MCPA technologies, up to 20W Downlink Power Output.
- Automatic Digital gain control and Antenna Feedback Cancellation (AFC) feature that can reduce the isolation requirement.
- Integrated wireless modem for remote configuration, monitoring and control.
- Real time isolation detection for easy commissioning.
- Compatible to Comba generic OMT and CMS platform.
- Designed for all weather outdoor installation– waterproof, damp-proof and omni-sealed (IP65).

Functional Block Diagram



DS-Control:0-0-3 / 0421

Specifications

Electrical				
Frequency Range, Uplink	MHz	1710-1785		
Frequency Range, Downlink	MHz	1805-1880		
Operating Bandwidth (Adjustable)	MHz	0.2-20		
Number of Sub-bands		2		
Instantaneous bandwidth	MHz	40		
Total Output Power, Uplink	dBm	30		
Total Output Power, Downlink	dBm	37	40	43
Maximum System Gain	dB	95		
Gain Adjustment Range (1dB step)	dB	0-30, support AGC		
Antenna Feedback Cancellation	dB	Gain - 5		
Uplink Noise Figure	dB	≤5		
System Group Delay	μsec	≤10		
Spectrum Emission Mask		Compliance with 3GPP TS 36.106		
ACRR				
EVM				
PCDE				
Intermodulation				
Absolute Maximum RF Input Power	dBm	+10		
Input VSWR		≤ 1.5		
Impedance	Ω	50		
Mechanical				
Dimensions, H x W x D	mm	500 x 356 x 140		
Weight(approx.)	kg	18		
Power Supply	VAC	100-240/47-63Hz		
Power Consumption(approx.)	W	85	95	130
MCU Battery Backup Time(approx.)	hr	2		
Enclosure Cooling		Convection		
RF Connectors		4.3-10		
Operating Temperature	°C	-33 to +55		
Operating Humidity		≤ 95%		
Environmental Class		IP65		
MTBF	hr	≥50,000		

Note: Typical specification at room temperature

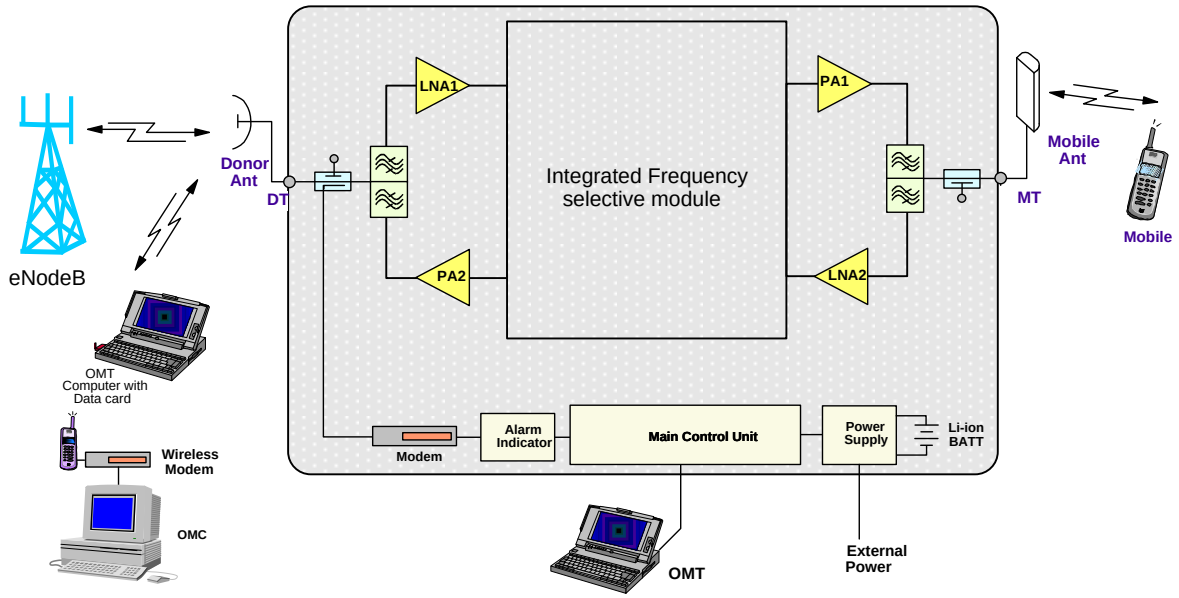
2100MHz Digital Band Selective Repeater

RX-2123 V5

Features

- Support different bandwidth WCDMA /LTE carrier
- Utilizing the latest Pre-distortion MCPA technologies, up to20W Downlink Power Output.
- Automatic Digital gain control and Antenna Feedback Cancellation (AFC) feature that can reduce the isolation requirement.
- Integrated wireless modem for remote configuration, monitoring and control.
- Real time isolation detection for easy commissioning.
- Compatible to Comba generic OMT and CMS platform.
- Designed for all weather outdoor installation– waterproof, damp-proof and omni-sealed (IP65).

Functional Block Diagram



DS-Control:0-0-3 / 0421

Specifications

Electrical				
Frequency Range, Uplink	MHz	1920-1980		
Frequency Range, Downlink	MHz	2110-2170		
Operating Bandwidth (Adjustable)	MHz	0.2-20		
Number of Sub-bands		2		
Instantaneous bandwidth	MHz	40		
Total Output Power, Uplink	dBm	27		
Total Output Power, Downlink	dBm	37	40	43
Maximum System Gain	dB	95		
Gain Adjustment Range (1dB step)	dB	0-30, support AGC		
Antenna Feedback Cancellation	dB	Gain - 5		
Uplink Noise Figure	dB	≤5		
System Group Delay	μsec	≤10		
Spectrum Emission Mask		Compliance with 3GPP TS 36.106		
ACRR				
EVM				
PCDE				
Intermodulation				
Absolute Maximum RF Input Power	dBm	+10		
Input VSWR		≤ 1.5		
Impedance	Ω	50		
Mechanical				
Dimensions, H x W x D	mm	500 x 356 x 140		
Weight(approx.)	kg	18		
Power Supply	VAC	100-240/47-63Hz		
Power Consumption(approx.)	W	85	95	130
MCU Battery Backup Time(approx.)	hr	2		
Enclosure Cooling		Convection		
RF Connectors		4.3-10		
Operating Temperature	°C	-33 to +55		
Operating Humidity		≤ 95%		
Environmental Class		IP65		
MTBF	hr	≥50,000		

Note: Typical specification at room temperature