

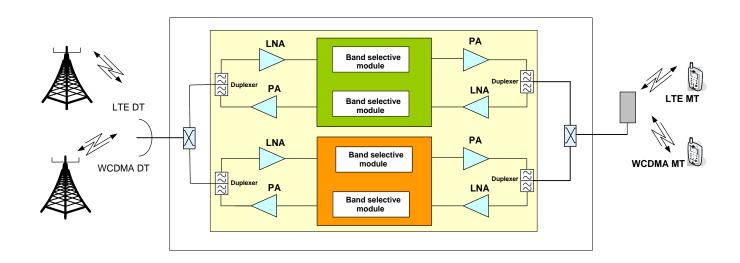
# **Dual-band Digital Pico Repeater**

#### MP-7832

#### **Features**

- Bandwidth adjustable for both downlink and uplink.
- Max. 2 pass band segments with independent ON/OFF for maximum flexibility.
- Max. 17dBm total output power.
- Option for single band, dual band or tri-band.
- Offline isolation detection for easy commissioning.
- Low noise amplifier improves system noise figure for better voice quality and reduced drop call.
- Highly integrated design with miniaturized enclosure, small size, light weight and easy to install.
- Includes Modem for remote monitoring (option).
- Compatible to Comba generic OMT and CMS platform.

### **Functional Block Diagram**







## Specifications-17dBm

Electrical			1800MHz	2100MHz
Operating Frequency, Uplink		MHz	1710-1785	1920-1980
Operation Frequency, Downlink		MHz	1805-1880	2110-2170
Instantaneous Bandwidth		MHz	50	50
Operating Bandwidth Per Sub-band*		MHz	0.2-25	3-20
Number of Sub-bands			2	
Total Output Power, Uplink		dBm	14	14
Total Output Power, Downlink		dBm	17	17
Maximum System Gain		dB	70	
Attenuation Adjustment Range (1dB step)		dB	0-30	
ALC Range		dB	≥ 30	
Pass Band Ripple at FBW, p-p		dB	≤ 4	≤ 4
System Group Delay		μsec	≤ 6.5	
Spurious Emission Mask			Compliance with 3GPP TS 36.106	Compliance with
Intermodulation				3GPP TS 25.106
EVM				3GPP TS 36.106
Absolute Maximum RF input power		dBm	-10	
Input VSWR			≤ 2.8	
Impedance		Ω	50	
Mechanical				
Dimensions, W x H x D		mm	316 x 224 x 41.5	
Weight (approx.)		kg	1.8	
External Power Supply Unit	Input	VAC	100-240/50-60Hz	
	Output	VDC	12	
Power Consumption		W	30	
Enclosure Cooling			Convection	
Connectors			SMA-Female	
Operating Temperature		°C	-10 to +40	
Operating Humidity			≤ 85%	
Environmental Class			IP30	
MTBF		hr	≥ 50,000	
Remote Monitoring (option)			Built in WCDMA Modem	

Note: Typical specification at room temperature;

<sup>\*:</sup> GSM Max. Bandwidth 25MHz, WCDMA Max. Bandwidth 15MHz, LTE Max. Bandwidth 20MHz.



## Specifications-13dBm

Electrical			1800MHz	2100MHz
Operating Frequency, Uplink		MHz	1710-1785	1920-1980
Operation Frequency, Downlink		MHz	1805-1880	2110-2170
Instantaneous Bandwidth		MHz	50	50
Operating Bandwidth Per Sub-band*		MHz	0.2-25	3-20
Number of Sub-bands			2	
Total Output Power, Uplink		dBm	13	13
Total Output Power, Downlink		dBm	13	13
Maximum System Gain		dB	70	
Attenuation Adjustment Range (1dB step)		dB	0-30	
ALC Range		dB	≥ 30	
Pass Band Ripple at FBW, p-p		dB	≤ 4	≤ 4
System Group Delay		μsec	≤ 6.5	
Spurious Emission Mask			0 1	Compliance with
Intermodulation			Compliance with 3GPP TS 36.106	3GPP TS 25.106
EVM				3GPP TS 36.106
Absolute Maximum RF input power		dBm	-10	
Input VSWR			≤ 2.8	
Impedance		Ω	50	
Mechanical				
Dimensions, W x H x D		mm	316 x 224 x 41.5	
Weight (approx.)		kg	1.8	
External Power Supply Unit	Input	VAC	100-240/50-60Hz	
	Output	VDC	12	
Power Consumption		W	30	
Enclosure Cooling			Convection	
Connectors			SMA-Female	
Operating Temperature		°C	-10 to +40	
Operating Humidity			≤ 85%	
Environmental Class			IP30	
MTBF		hr	≥ 50,000	
Remote Monitoring (option)			Built in WCDMA Modem	

Note: Typical specification at room temperature;

<sup>\*:</sup> GSM Max. Bandwidth 25MHz, WCDMA Max. Bandwidth 15MHz, LTE Max. Bandwidth 20MHz.