

# TETRA 800 MHz Band Selective Mini Repeater (BDA)

Model No: MR-800T-20W75

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## Features:

- **Bi Directional Amplifier (BDA) configuration**
- **Supports SMR 800 MHz, APCO25, TETRA & PMR technologies**
- **Band Selective supporting or partial bandwidth with high out of band rejection**
- **User friendly front panel control & plug and play installation - the repeater status can be known during installation**
- **Smart function which can be activated via the front panel, preventing UL interference, self-oscillation and also keeps optimal condition automatically.**
- **Isolation detection function**
- **Low power consumption with sleeping mode (saving power)**
- **Linear power amplification to effectively suppress inter-modulation and spurious emission**
- **Smart Automatic Level Control (ALC) ensures output level stable and adjustable**
- **Simple installation with external AC/DC adapter**

## Introduction

The EMTS Telecom Services Ltd. SMR800MHz Band Selective Mini Repeater (BDA) provides an affordable solution to solve the indoor signal coverage problems in APCO25, TETRA or PMR (Smart Zone) 800MHz systems due to signal fading and attenuation caused by architecture obstacles. It's easy installation and maintenance helps the operator to get fast return on investment. The repeater is working as a relay between the BTS and mobiles. It picks up the strongest signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Indoor Signal Distribution System to the weak/blind coverage area and the mobile signal is also amplified and retransmitted to the BTS via the opposite direction. The band-selective function can choose to amplify the signal within the customized band. Hence, the installation of the Mini Repeater is easy, simply just plug and play. With The repeater status can be known

**EMTS Telecom Services Ltd.** offers a comprehensive portfolio of enhanced coverage solutions for the Wireless Networks, Based on advanced technologies. **EMTS** proven, indoor and outdoor solutions solve a wide range of network challenges including interference and oscillation problems, challenging coverage holes, rapid response deployment and inadequate in-building coverage. Regardless of the technology or frequency, **EMTS** can provide customized coverage solutions that address any combination of unique and complex network needs for the Wireless Networks.



during installation with indication on the repeater front panel, which is very convenient to installation teams.

## Technical Specifications:

1.Electrical Specification		Uplink	Downlink
Frequency Range		806 - 824 MHz Full or partial bandwidth	851 –869 MHz Full or partial bandwidth
Minimum Gain		≧ 75dB	
Auto Gain Control(AGC)		≧ 25dB	
Auto Gain Setup Range(Inside)		31dB/1dB step	
Gain Flatness		+/- 1.5 dB max	
Maximum Input power		0 dBm	
Output Power		20 dBm	20 dBm
Intermodulation Products	9KHz~1GHz	≧ -30 dBm	
	1GHz~12.75GHz	≧ -30 dBm	
Spurious Emission	9KHz~1GHz	≧ -36 dBm	
	1GHz~12.75GHz	≧ -30 dBm	
Out of Band Rejection	± 400 KHz	≧ 25 dBc	
	± 600 KHz	≧ 35 dBc	
	± 1 MHz	≧ 45dBc	
	± 5 MHz	≧ 50 dBc	
Noise Figure		≧ 6dB	
VSWR		≧ 1.5	
Group Delay		≧ 5 μ s	
Power Supply		DC 5A/9V - ≧ 50W	
<b>2.Mechanical specification</b>			
Dimensions		191*296*76mm	
Weight		4.5kg	
I/O Connector/ Impedance		N-female / (Nominal)50Ω	
<b>3.Environmental specification</b>			
IP Rating		IP40	
Operating Temperature		-10°C to 50°C	
<b>4. Monitoring specification</b>			
LED indication	Alarm LED	Antenna isolation is lower than the isolation for equipment installation Or ALC1~5dB,red	

### About EMTS Telecom Services Ltd.:

EMTS is a leading supplier of high-quality RF coverage solutions designed to maximize wireless network coverage in difficult RF environments and complex settings. The company specializes in extending RF radio coverage to rural areas, office buildings, subways, tunnels and shadowed areas. The EMTS coverage solution supports all major mobile technologies and standards of wireless Networks.

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TURNING TECHNOLOGY INTO SOLUTIONS

	Power LED	DC ON/OFF
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