

20dBm TETRA /DMR 400MHz Mini Repeater (BDA) High Performances High Selectivity

Model No: MR-400-20W80



Features:

- Designed to extend in-building coverage of TETRA/ LMR/DMR at the 400MHz band
- Comply with APC025, TETRA & ETSI Standards.
- Fully transparent to the DMR/LMR network; designed to support voice data and dispatch.
- Friendly GUI or direct WIFI connectivity for a plug-and-play installation
- Smart function (IMOP) prevents self-oscillation due to poor isolation using Isolation Measurement Oscillation Preventing (IMOP) smart algorithm
- Linear power amplification effectively suppresses inter-modulation and spurious emission with extremely low power consumption
- Smart Automatic Level Control (ALC) ensures output level is stable and adjustable
- Simple installation with external AC/DC power supply
- An Optional IP65 enclosure
- An optional 4G modem for Remote Management and control using EMTS NMS

Introduction

The EMTS Telecom Services Mini-Repeater (MR) is a Bi-Directional Amplifier; it provides an excellent solution to the problem of poor signal coverage. The MR amplifies the signals from mobile phones and base stations and can be used in 'dead zones' where service is poor. Typical installations can be in basements, offices, restaurants, hotels, apartments, parking lots, etc., initially blocked by structures and limited obstacles or coverage. Easy installation, lightweight Design, and comfortable use make the EMTS Mini-Repeater a cost-effective and practical solution for extending signal coverage. An IMOP (Isolation Measurement - Oscillation Prevention) mechanism designed to prevent oscillation due to low or marginal isolation between donor and service antennas.



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.

Technical Specifications:

Electrical Specification	Uplink	Downlink
Frequency	380-385 385-390 410-415 415-420 450-455 455-460	390-395 395-400 420-425 425-430 460-465 465-470
Bandwidth	Band Selective type according to the above list of standard frequencies or customized band per customer definition	
Gain	80dB +/-3dB	80dB +/-3dB
Passband Ripple	± 1.5dB	
Gain Attenuation Range (AGC)	0-20 dB in 1 dB step	
Manual Gain Control	0-30 dB in 1dB step	
Composite Output Power	+ 20 dBm	+ 20dBm
Noise Figure @ Maximum Gain	5 dB	
Propagation Delay	5μsec	5μsec
Superius Emission & Intermodulation	Fully comply with ETSI TS 151 026	
Spurious emissions	≤-36dBm (9KHz to 1GHz). ≤-30dBm (1GHz to 12.5GHz)	
Third-order Inter-Modulation	≤ -45dBc / 30kHz (measured under rated output power)	
Impedance Level	50 ohms	
Power Supply	12v dc via external AC to DC convertor	
VSWR	1.8:1	
Environmental specification		
Operating Temperature	-25 to 55° C	
IP Rating/water resistance	IP30 I (optional P65)	
MTBF	100,000 Hours	
Mechanical specification		
RF Connector	N-Type	
Dimensions	200 x 198 x 82mm	
Weight	8Kg	
Installation	Wall Mounting, Tower Mounting, Pole Mounting, and Rack	
LDD ideation specification		
Alarm and Power LED	1. Power On/Off / Major Alarm LED 2. Green works properly, RED = Alarm 3. LED Off =Repeater is off or no AC power 4. Isolation is lower than the isolation for equipment installation LED ideation. 5. ALC ideation	



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.

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TURNING

Comply with Standards

Comply with	EN 301 489-18, EN 60 950 & TS 101 789-1 73/23/EEG
Safety	EN60950-1, EN 50385
EMC	EN 301 489-1, EN 301 489
Radio	EN 302 561
DMR	ETSI TS 101 789-1 and EN 303 035-1 and EN 300 394-1
CE	Comply



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