EMTS
Telecom Services

TURNING TECHNOLOGY INTO SOLUTIONS

TETRA 400 MHz High Performance Power Repeater (BDA)

Model No: PR-450-30W80

Features:

- **Bi Directional Amplifier (BDA) configuration**
- **30dBm Downlink composite power meets TETRA standard.**
- **Band Selective configuration (Optional channel selective)**
- **Linear amplification with low spurious inter-modulation output**
- **High reliability; MTBF ≥100,000 hours**
- **Operator-Grade performance in a Compact size and waterproof enclosure suitable for outdoor and indoor instaltions**
- **Advanced Metal cavity filter technology, allows wider receiving and transmitting separation, flatness, higher stability and lower noise figure.**
- **Advanced design, with built-in ALC function, provides auto amplitude fixing, Auto Shutdown, Over output protection, etc.**
- **Optional for remote management via a GPRS modem.**

Introduction

The EMTS Telecom Services Ltd. TETRA Band selective Repeaters (BDA) provide an excellent solution to the problem of poor signal coverage for outdoor coverage extension and for in-building coverage, e.g.: underground, tunnels & subways; Low traffic areas such as suburbs and villages, confined areas such as hospital, marketplace and basement. Through the use of the Repeater the TETRA operator can easily expand a base station's service area by filling in coverage holes caused by terrain, buildings or tunnels. The Repeater amplifies the signals from TETRA handset and base stations and can be used in dead areas where service is poor. The TETRA Repeater is connected to an outdoor 'donor' antenna using a coaxial cable. The donor antenna transmits signals from mobile phones and receives signals from the BTS. The EMTS power repeater is a cost-effective and practical solution for extending signal coverage. The unit includes a wireless modem to support remote and optional monitoring with advanced NMS SW.

EMTS Telecom Services 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.

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Electrical Specifications		Uplink	Downlink
Frequency Ranges (MHz) (factory set to customer bands or tunable BW)		380-385 385-390 410-415 415-420 450-455 455-460	390-395 395-400 420-425 425-430 460-465 465-470
Gain		70 dB(±3dB)	
Gain Adjustment Range		30 dB in 1 dB steps	
Pass Band Ripple		≤±1.5 dB	
Output Power		24 dBm (±1 dB)	30dBm (±1 dB)
IMD		-60dBc	-60dBc
AGC Range		20 dB	
VSWR		≤1.8:1	
Noise Figure@ Max Gain		≤6 dB	
Spurious Emission	Within Working Band	≤-25dBm/30KHz	
	Outside Working Band（Off working band edge 2.5MHZ）	9KHz to 1GHz:≤-36dBm/30KHz	
		1GHz to 12.75GHz ：≤-30dBm/30KHz	
Inter-modulation attenuation	Within Working Band	≤-15dBm/30KHz	
	Outside Working Band（Off working band edge 2.5MHZ）	9KHz to 1GHz ：≤-36dBm/30KHz	
		1GHz to 12.75GHz ：≤-30dBm/30KHz	
Group Delay		<5 μs	
External connection			
Connector		N-F / 50 ohm	
Alarm Detection		HPA, LNA, TEMP, PSU,IF module, Door Local LED display, Dry Contacts; RS232 local monitoring	
Local Alarm (optional		PSU, HPA, Temp, gain control of Uplink and Downlink	
Power Supply		110VAC or 220VAC ±15% 50-60Hz / 80 Watts	
Environmental			
Operating Temperature Range		-20 to +55 °C	
Cooling		Convection	
Environmental Sealing		IP65	
Operating Humidity		Up to 95% (non-condensing)	
Complies with		EN 301 489-18, ETSI TS 101 789-1, EN 60 950	
Standards		Locked aluminum wall mount case 650×400×295 mm	

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.