

40dBm DMR/TETRA 400MHz Band or Channel Selective High Power pickup Repeater (BDA) In 19" Enclosure



Model No: BSR-400-40W90-390

Features:

- 19-inch enclosure for rack mounting installation (optional IP65 outdoor enclosure)
- Bidirectional Amplifier configuration for off-air compliance with TETRA & CE standards.
- Support Band or Channel Selective for TETRA or DMR networks
- Provide quick RF coverage extension to TETRA Base-Station using fiber or coax DAS.
- Metal cavity filter technology allows wider receiving/transmitting separation, higher stability, and lower noise figure.
- Intelligent design, with a built-in ALC function, provides auto amplitude compensation.
- USB port for local supervision, the built-in 3G/4G modem to communicate for remote management and configuration, and WIFI connectivity for local settings via mobile app.

Introduction

The EMTS TETRA Band selective Power Repeaters (BDA) provide an excellent solution for in-building applications for poor signal coverage or outdoor coverage extension. Typical applications are Airports, Tourism regions, tunnels, factories, mining districts, villages, Hotels, exhibition centers, basements, shopping malls, offices, parking lots, and others. With the Repeater, the TETRA or TETRAPOL operator can quickly expand a base station's service area by filling in coverage holes caused by terrain, buildings, or tunnels. The Repeater amplifies the TETRA or TETRAPOL handset signals and base stations and can be used in dead areas where service is poor. The 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. Easy installation, lightweight design, and very friendly GUI make our Repeater easy to use and install.



EMTS Telecom Services offers a comprehensive portfolio of enhanced coverage solutions for Wireless Networks, Based on advanced technologies. EMTS has proven, that 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 Wireless Networks.

Technical Specifications

Electrical Specifications	Uplink	Downlink
Frequency (MHz) (Other customized bands are possible)	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	5MHz Optional channel selective with up to 8 channels of 25KHz	
Gain	90dB(±5dB)	
Gain Adjustment Range	30 dB in 1 dB step	
Pass Band Ripple	≤3dB	
Composite Output Power	27dBm (±1 dB)	40 dBm (±1 dB)
AGC Range	30 dB	
VSWR	1.5:1	
Noise Figure@ Max Gain	≤4.5 dB	
Spurious emissions	≤-36dBm (9KHz to 1GHz); ≤-30dBm (1GHz to 12.5GHz)	
Third-order Inter-Modulation	≤ -45dBc / 30kHz (measured under rated output power)	
Intermodulation products	according to ETSI TS 101-789-1	
Group Delay Channel selective mode	12 μs typical	
Group Delay band selective mode	5 μs	



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. Specification may change without notice All rights reserved

External connection	
Connector	N-F / 50 ohms
Alarm Detection	HPA, LNA, TEMP, PSU, Digital IF module, Local LED display, external Dry Contacts
Local Alarm and Setting	Through RJ45
Summary Alarm output	Via Dry contact
External alarm inputs	4 alarm inputs
Remote management and alarms	Via 34G modem or dial-up modem (optional)
Power Supply	Standard - 220V AC Power supply External Backup battery 24v input
Power Consumption	<150 watts

Environmental	
Operating Temperature Range	-30 to +55 °C
Cooling	Convection
Environmental Sealing	IP31 (optional ip 65 outdoor configurations)
Operating Humidity	Up to 95% (non-condensing) comply with ETSI EN 300 019-2-4
Size (W x H x D)	19" ,x 4U,x 450mm
Comply with Standards	
Safety	EN60950-1, EN 50385
EMC	EN 301 489-1, EN 301 489
Radio	EN 302 561
TETRA (DMR)	ETSI TS 101 789-1 and EN 303 035-1 and EN 300 394-1
CE	Comply



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