

40dBm DMR 400MHz High Power Channel Selective Bi-Directional Amplifier

Model No: CSPR-400-40W90



Features:

- IP65 enclosure for indoor or outdoor installations
- Bi-directional Amplifier configuration for off-air compliance with DMR & CE standards
- Support Channel Selectivity at the DMR/ TETRA/ P25 bands
- Utilizes advanced digital high-speed DSP technology and complies with DMR standards.
- Provide quick RF coverage extension to DMR / TETRA/ P25 Base-Station, DSP module support up to 4 digital filters for 8 DMR / TETRA/ P25 channels, Band-Selective configuration or dual band-selective, and selective channel configuration is an optional
- Metal cavity filter technology allows wider receiving/transmitting separation, higher stability, and lower noise figure.
- Intelligent design provides auto amplitude compensation with a built-in ALC function.
- 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 Telecom Services Ltd. DMR channel selective Power Bi-Directional Amplifier (BDA) provides an excellent solution for in-building applications for poor signal coverage or outdoor coverage extension. Typical applications are airports, tourism regions, tunnels, factories, mining facilities, villages, hotels, exhibition centers, basements, shopping malls, offices, parking lots, and others. With the BDA, the DMR/TETRA/P25 operator can quickly expand a base station's service area by filling in coverage holes caused by terrain, buildings, or tunnels. The BDA amplifies the DMR/TETRA/P25 handset signals and base stations and can be used in dead areas where service is poor. The BDA is connected to an outdoor 'donor' antenna using a coaxial cable. The donor antenna transmits signals from the handset and receives signals from the DMR/TETRA/P25 BTS. Easy installation, lightweight design, and very friendly GUI make our Repeater easy to use and install. Its channel selective functionality enables to amplify only the selected up to 8 channels (option for 16 or more channels).



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			
Frequency (MHz) (Other customized bands are possible)		Uplink	Downlink
		380-385	390-395
		385-390	395-400
		410-415	420-425
		415-420	425-430
		450-455	460-465
		455-460	465-470
Number of Channels (Digital Filter)		Up to 8 digital filters of 25KHz each	
Maximum Output Power	Uplink	27±2dBm	
	Downlink	40±2dBm	
Maximum Gain		90±3dB	
Gain Adjustment Range		0~31dB in Step of 1dB	
AGC		≥20dB	
VSWR		≤ 1.5	
Noise Figure		≤ 10dB	
Third-order Inter-Modulation		≤ -45dBc	
Spurious Emission	9KHz~1GHz	≤ -36dBm	
	1GHz~12.75GHz	≤ -30dBm	
System Delay		≤8μs	
Mechanical Specifications			
Output/Input Resistance		50 Ω	
RF Connector		2xN- Female	
Power Supply(Customized)		AC220V, 50/60Hz	
Dimensions		500*440*235mm	
Weight		≤35kg	
Mounting		Wall or Pole Mounting	
Local Control		Local Via USB Interface	
Remote Mode		Cloud NMS Via 4G Wireless Modem or RJ45 Port (IP Connectivity)	



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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Environmental Specifications	
Operating Temperature	-25 ~ +55 °C
Application	Indoor or Outdoor(IP65)
Relative Humidity Range	≤95%(Non Condensing)
Comply with Standards	
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

Remark:

- For v1 version: frequencies of the factory default Settings
CH1. Downlink: 442.075MHz, Uplink: 447.075MHz



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