

TETRA 400MHz High Power Channel Selective Repeater (BDA)

Model No: EMTS-CSPR-400-40W90



- Bi Directional Amplifier (BDA) configuration
- 40dBm composite power types meets TETRA system standards.
- Supports all combinations of TETRA 400 MHz bands
- Utilizes advanced digital IF and high speed DSP technology.
- Channel bandwidth and number of channels can be controlled via NMS.
- Provide quick RF coverage service to your TETRA Base-Station
- Waterproof enclosure suitable for outdoor and indoor deployments.
- Metal cavity filter technology, allows wider receiving / transmitting separation, higher stability and lower noise figure.
- Intelligent design, with built-in ALC function, provides auto amplitude compensation.

Introduction

The EMTS TETRA Channel/Band selective Power Repeaters (BDA), provides an excellent solution to the problem of poor signal coverage for outdoor coverage extension and for in-building applications.

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 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. The EMTS power repeater is a cost-effective and practical solution for extending signal coverage and includes wireless modem to support remote and monitoring NMS.



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.





Electrical Specifications	Uplink	Downlink	
Frequency Ranges (MHz)	380-385 385-390 410-415 415-420	390-395 395-400 420-425 425-430	
	450-455 455-460	460-465 465-470	
Channel Operational Bandwidth	50KHz-5 MHz (con	50KHz-5 MHz (continuously adjustable)	
Number of Channels	1 to 8 programm	1 to 8 programmable in same unit	
Monitor Ports	-30dBc	-30dBc	
Max. Gain	90dB	90dB(±5dB)	
Gain Adjustment Range	30 dB in	30 dB in 1 dB step	
Pass Band Ripple	≤±1	≤±1.5 dB	
Output Power	30dBm(±1 dB)	40 dBm(±1 dB)	
IMD	-60dBc	-60dBc	
AGC Range	20	20 dB	
VSWR	≤1.4:1(<i>i</i>	≤1.4:1(All Ports)	
Noise Figure@ Max Gain	≤4	≤4 dB	
Spurious	≤-36dBm (9KHz to 1GHz);	≤-36dBm (9KHz to 1GHz); ≤-30dBm(1GHz to 12.5GHz)	
Group Delay	12 to	12 to 30 µs	
External connection			
Connector	N-F /	N-F / 50 ohm	
Alarm Detection	HPA, LNA, TEMP, PSU	HPA, LNA, TEMP, PSU, Digital IF module, Door	
	Local LED display, Dry Con	Local LED display, Dry Contacts; RS232 local monitoring	
Local Alarm Option; NMS interface	PSU, HPA, LNA, Digital IF N	PSU, HPA, LNA, Digital IF Module, Temp, Door; Remote	
	control gain of Up	control gain of Uplink and Downlink	
Power Supply	110VAC or 220VAC ±1	110VAC or 220VAC ±15% 50-60Hz / 200 Watts	
Environmental			
Operating Temperature Range	-20 to	-20 to +55 °C	
Cooling	Conv	Convection	
Environmental Sealing	IF	IP65	
Operating Humidity	Up to 95% (no	Up to 95% (non-condensing)	
Complies with	EN 301 489-18, ETSI TS 101 7	EN 301 489-18, ETSI TS 101 789-1, EN 60 950	
Standards	Locked aluminum wall mo	Locked aluminum wall mount case 650×400×295 mm	

Ordering information:

Model No: EMTS-CSPR-400-40W90-X-Y

X= Uplink band Y= Downlink band

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.

