

## **WCDMA – CDMA 450MHz Band Selective Power Repeater**

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**Model No: MR-450-30W80**



### **Features:**

- **High system gain, with full duplex design**
- **30 dBm Downlink Power**
- **Meets EVDO, CDMA & WCDMA standards**
- **Modern design based on reliable SAW filtering technology.**
- **Automatic Level Control (ALC) ensures output level stable and adjustable continuously**
- **Linear power amplification to effectively suppress inter-modulation and spurious emission with Extremely high reliability (MTBF more than 15 years)**
- **Local and Remote control with advanced GUI**
- **Simple installation with optional power of 220 VAC, 110 VAC or -48 VDC**

### **Introduction**

The EMTS Telecom 450MHz Power Repeaters (PR) provides an excellent solution to the problem of poor signal coverage for coverage extension and for in Outdoor & In-Building applications. The PR is working as a relay between the BTS and mobiles. It picks up the strongest signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Indoor Signal Distribution System to the weak/blind coverage area. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction. The EMTS repeater also improves the network capacity by allowing better data coverage at areas with limited signal strengths. The AHPR 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 makes the High Power Repeater a very cost-effective and practical solution for extending signal coverage. The EMTS High Power Repeater series can supports all combination of frequencies including CDMA, GSM and WCDMA.



**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.

## Technical Specification

Frequency Range	Uplink	Type A: 450.5~454.5 MHz Type B: 452.5~457.5MHz Or any custom bandwidth
	Downlink	Type A: 460.5~464.5MHz Type B: 462.5~467.5MHz Or any custom bandwidth
Maximum Gain		80 dB
Downlink composite Output Power		30 dBm
Uplink composite Output Power		24 dBm
AGC control range		≥30dB
Maximum Input power(Non-destructive)		≤0dBm
In-Band Ripple		+/- 1.5 dB
VSWR		2:1
Group delay time		≤ 5μs
I/O Impedance		50 Ω
Noise Figure		≤6dB
Third-order Inter-Modulation		≤ -40dBc
Out of Band Gain	±400KHz	<50dB
	±600KHz	<40dB
	±1MHz	<35dB
	±5MHz	<25dB
Intermodulation Products	9kHz~1GHz	≤ -36dBm/30kHz
	1GHz~12.75GHz	≤-30dBm/30kHz
Spurious Emission	9kHz~1GHz	≤ -36dBm/30kHz
	1GHz~12.75GHz	≤-30dBm/30kHz
RF Connector		N-Type (Female)
Power Consumption		≤ 100 W
Power Supply		110-220 VAC or -48VDC
Dimensions		351 X 460 X 146 mm
Weight		≤ 21 kg
Alarm Monitoring System		Via Internal Wireless Modem
Operating Temperature		-20 to +50 °C
Application		Outdoor IP65
Humidity		≤95%

**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.





TURNING TECHNOLOGY INTO SOLUTIONS



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