

43dBm 450 MHz LTE – WCDMA Band 31 ICS High Power Repeater

Model No: IHPR-450-43W95



Features

- 43dBm composite Downlink power meets LTE standards (Optional 5G)
- Advanced Adaptive Echo Interference Cancellation technology, the ICS (Interference Cancellation System) eliminates oscillation between Service and Donor Antennas using Digital Signal Processing, designed for Band-31
- Intelligent design, with built-in ALC function & Oscillation Prevention
- Advanced GUI, Automatic Level Control for tuning free setup
- Compact size and High Performance at IP-65 enclosure for an outdoor installation, Low power consumption & sleeping mode (saving power)
- Local setting via USB, Remote management for Configurable alarms using EMTS NMS (Network Monitoring System)

Introduction

The EMTS Telecom Services 450 MHz Band Selective ICS High Power Repeaters (IHPR), supporting band-31, provide an excellent solution to the problem of poor signal coverage for coverage extension and in building & outdoor applications. The IHPR amplifies the signals from mobile phones and base stations and can be used in dead areas where coverage is poor. The EMTS IHPR also improves cellular network capability by improving data coverage in areas with limited signal strengths. 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 service antennas placed in dead zones or towers for outdoor applications. Signals from mobile phones used in the dead zones are then received by the service antenna and transmitted to the IHPR donor antenna, which transmits the signals to the base station. The Repeater Advanced Adaptive Echo Interference Cancellation technology always provides optimized signal coverage. The special design allows fast network deployment, real-time isolation detection, and ICS operation, ICS (Interference Cancellation System) eliminating oscillation between Service and Donor Antennas using Digital Signal Processing.



EMTS Telecom Services offers a comprehensive portfolio of enhanced coverage solutions for tireless 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 Wireless Networks.

Electrical Specification:

		Uplink	Downlink
Frequency Range		452.5-475.5 MHz	462.5-467.5 MHz
Gain		93dB +/-3dB	
Composite output power		30dBm	43 dBm
Gain Control Range		0-30dB	
Out of Band Rejection	± 400 KHz	≥ 25 dBc	
	± 600 KHz	≥ 35 dBc	
	± 1 MHz	≥ 40 dBc	
	± 5 MHz	≥ 50 dBc	
Spurious Emission		In-band ≤36 dBm 9KHz – 1 GHz ≤ 36 dBm / 100 kHz 1 GHz – 12.75 GHz ≤ 30 dBm / 100 KHz	
Intermodulation Products	9 KHz~1 GHz	≥ 45dBc	≥ 36dBc
	1 GHz~12.75 GHz	≤ -30 dBm	≤ -30 dBm
Noise Figure		5 dB	
EVM		8% (optional 3.5%)	
Operating Maximum Gain		≥ Antenna Isolation + 10dB	
Oscillation Protection		Using (ICS) Interference Cancellation System	
Group Delay		5 μ Sec. Maximum	
Pass Band Ripple		2 dB p-p	
VSWR		1.5:1	
Power Supply		110-264/45-60 Hz VAC(optional -48vdc)	
Power consumption		200watts	
RF Connector / Impedance		N female / 50 ohm	
Size		Locked aluminum wall mount case 480x420×295 mm	
Weight		18 kg	
Enclosure		IP65 Box ready for wall or poll mount installation	
Work temperature		-30 ° C to +55 ° C	
Enclosure cooling		Convection	
Local setting		Using USB cable	
Remote Management		Via Wireless LTE modem using EMTS NMS	
MTB		>100,000 hours	
Conformance Standard		Safety: EN 60950, EMC: ETSI 301 489-50, ETSI 301 489-1, Radio: ETSI 301 908-11, ETSI 301 908-15	
3GPP standards		TS 25.106, TS 36,106, TS 38.104	

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. All rights reserved - Specifications are subject to change without notice

