

Tri Band 36dBm Macro Repeater 900-1800-2100MHz Model No: HPR-9-18-21-36W91



Features:

- **Very low Up-Link noise – an excellent solution to extend BTS coverage range for in Outdoor or In-Building deployments.**
- **Supports, GSM, WCDMA & LTE standards - Fully comply with 3GPP, HSPA, HSDPA and TS-136 (LTE MIMO or SISO).**
- **Full or partial bandwidth with 36dBm composite power per band**
- **Isolation detection function to prevent self-oscillations.**
- **Low power consumption with sleeping mode.**
- **Linear power amplification to effectively suppress inter-modulation and spurious emission**
- **Smart Automatic Level Control (ALC) ensures output level stable and adjustable continuously**
- **Support OMT/OMS (optional) remote control.**
- **AC or DC power types**

Introduction

The EMTS Telecom Tri Band High Power Macro Repeaters (HPR) provides an excellent solution to the problem of poor signal coverage for coverage extension and for in building & outdoor applications. The HPR designed to support signal coverage for three bands 900, 1800 and 2100MHz. The repeater amplifies the signals from mobile phones and base stations and can be used in dead areas where service is poor. The HPR is also improving the capacity of the cellular network and the data coverage in areas with limited signal strengths. The unit 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 are placed in dead zones or in the tower for outdoor applications. Signals from mobile phones used in the dead zones are then received by the service antenna and transmitted to the HPR donor antenna, which in turn transmits the signals to the base station.

EMTS Telecom Services Ltd. 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 Specifications:

1. Electrical Specification			
900-1800 Bands		Uplink	Downlink
Frequency Range	GSM	905.2– 909.8 MHz	950.2– 954.80 MHz
	DCS	1740.2-1854.8 MHz	1835.2-1849.8 MHz
Maximum Gain		91 dB±3dB	91 dB±3dB
Gain Flatness		≅ 3dB	
Output Power		25dBm±2dB	36 dBm±2dB
Intermodulation Products	9KHz~1GHz	≅ 45dBc	≅ 45dBc
	1GHz~12.75GHz	≅ 45dBc	≅ 45dBc
Spurious Emission	9KHz~1GHz	≅ -36dBm	
	1GHz~12.75GHz	≅ -30dBm	
2100 Band		Uplink	Downlink
Frequency Range		1920 – 1930 MHz	2110 –2120 MHz
Maximum Gain		90 dB±3dB	90dB±3dB
Gain Flatness		≅ 3dB	
Output Power		25dBm±2dB	36 dBm±2dB
ACRR		33dBc/30KHz@±5MHz	40dBc/30kHz@±5mhz
		40dBc/30KHz@±10MHz	45dBc/30kHz@±5mhz
Frequency Stability		≅ ±0.01ppm	
Error Vector Magnitude		≅ 10%	
Peak Code Domain Error		≅ -35dB@Spreading Factor 256	
900-1800-2100			
Manual Gain Control		31dB in step of 1dB	
Automatic Gain Control		≅ 25dB	
Max. Input Power Without Damage		≅ 0dBm	
Noise Figure		≅ 6dB	
VSWR		≅ 2.0	
Group Delay		≅ 5µs	
Power Consumption		240W	
Power Supply		AC 110/ 220 V, 50/ 60 Hz (optional -48 v dc)	
2. Mechanical specification			
Dimensions		440*260*235mm	
Weight		40kg	
I/O Connector/ Impedance		N-female / (Nominal)50Ω	
3. Environmental specification			
IP Rating		IP66	
Operating Temperature		-30°C - 50°C	

About EMTS Telecom Services Ltd.:

EMTS Telecom Services 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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