

# 900-1800-2100MHz 40dBm High Power Triple Band Repeater Model No: HPR-91821-40W90

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## Features:

- Supports, GSM, WCDMA & LTE standards
- Fully comply with 3GPP and TS-136
- Very low Up-Link noise - an excellent solution to extend BTS coverage range for Outdoor or In-Building deployments.
- Full or partial bandwidth, with 40dBm composite power per band
- Isolation detection function to prevent self-oscillations
- Quick installation, easy operation and maintenance
- 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/NMS (optional) remote control systems
- Operating power: 90-220VAC or +24/-48VDC

## • Introduction

The EMTS Telecom Services Ltd. Triple Band High Power Repeater (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 designed to provide a more cost-effective solution than adding a new Base Transceiver Station (BTS) to improve signal coverage and communication quality in Triple band system. And its easy installation and maintenance can help carrier get fast return. 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.

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**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:

Frequency (MHz) Full band or any partial bandwidth	GSM / WCDMA 900MHZ		GSM / LTE1800MHZ		WCDMA2100MHZ	
	Uplink	Downlink	Uplink	Downlink	Uplink	Downlink
	890-915	935-960	1710-1785	1805-1880	1920-1980	2110-2170
Max Output Power	30±2dBm	40±2dBm	30±2dBm	40±2dBm	30±2dBm	40±2dBm
Max Gain	85±3dB	90±3dB	85±3dB	90±3dB	85±3dB	90±3dB
Gain Adjustment Range	1~31 dB @ step of 1 dB		1~31 dB @ step of 1 dB		1~31 dB @ step of 1 dB	
Automatic Level Control	≥25dB		≥25dB		≥25dB	
Pass Band Ripple	≤ 3 dB ptp		≤ 3 dB ptp		≤ 3 dB ptp	
Noise Figure	≤ 5 dB		≤ 5 dB		≤ 5 dB	
Third-order Inter-Modulation	≤ -45dBc		--		--	
Spurious emission	≤-36dBm/9KHz-1GHz ≤ -30dBm/1GHz-12.75GHz		Comply with 3GPP TS 25.106 V6.0.0		Comply with 3GPP TS 25.106 V6.0.0	
ACLR	--		±10MHz≤ -45dBc		±5MHz≤ -45dBc	
	--		±20MHz≤ -50dBc		±10MHz≤ -50dBc	
PCDE	--		≤ -35dB		≤ -35dB	
EVM	--		≤ 12.5%		≤ 12.5%	
VSWR	≤1.5		≤1.5		≤1.5	
Group Delay	≤ 5.0μs		≤ 5.0μs		≤ 5.0μs	
Maximum Input Power	-10dB		-10dB		-10dB	
<b>Monitoring Specifications</b>						
Remote Control Module	Wireless Modem					
OMT / NMS (optional) Monitoring Function	Real-time alarm for door status, temperature, power supply, VSWR, etc; Remote control such as turn on/off, increasing/decreasing output power, etc; Real-time status for output/input power, UL/DL gain, all status of repeater etc.					
<b>Environment &amp; Mechanical</b>						
Temperature range	-25°C to +55°C					
Humidity	0%- 90%					
Environment class	Outdoor					
Impedance	50Ω					
RF connector	N-Female					
Power Supply	110-240V AC					
Dimensions	500*440*187mm					
Weight	≤50kg					

### 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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