

Band-1 2100MHz 40 dBm Band Selective 3G/4G /5G Digital Repeater

Model No: DHPR-21-40W90



Features:

- Supporting 5G, LTE, and WCDMA using an advanced algorithm with +40dBm Downlink composite power complies with the 3GPP ETSI standards.
- Explicitly designed to answer the needs of 2100MHz multi-operator uses.
- Up to 2 digital filters 0.2 to 30MHz, supports single operator & multi-operator uses also supports a noncontiguous band.
- Real-time cancellation of an interference signal (fading & feedback signal)
- Comprehensive GUI, extremely easy to use and install.
- Compact Size - waterproof IP-65 enclosure suitable for outdoor & indoor deployments, supporting a wide range of temp. -20 to 55 °C.
- Metal cavity filter technology allows wider receive and transmits separation, better gain flatness, higher stability, and lower noise figure.
- Intelligent design with built-in ALC function provides auto amplitude fixing and noise reduction to the BTS.
- Remote Monitoring & Alarm (NMS) via 4G modem, WIFI functionality

Introduction

The EMTS Telecom 2100MHz Digital High-Power Repeaters (DHPR) provide an excellent solution to the problem of poor signal coverage for coverage extension and outdoor or in-building applications. The DHPR utilizes Digital technology to support multi-operator applications; The RF Repeater can automatically detect and cancel the interference signal caused by oscillation of RF feedback between the Donor and Services Antennas in real-time by adopting DSP (Digital Signal Processing) technology. It restores full operational capability against multi-path fading cellular signals and feedback signals by oneself and all types of waveforms from friendly and intentional interference sources. Easy installation, lightweight design, and friendly GUI make the EMTS DHPR a cost-effective and practical solution for extending signal coverage. The EMTS, High Power Repeater series, supports all frequencies, including WCDMA & LTE & 5G, selected by a digital mechanism.



EMTS Telecom Services offers a comprehensive portfolio of enhanced coverage solutions for the Wireless Networks, Based on advanced technologies. **EMTS** has proven, that 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 Specification

Item		UMTS/LTE/5G NR2100
Frequency Range	Uplink	1920 to 1980MHz
	Downlink	2110 to 2170MHz
Working Bandwidth(Digital Filter)		2 Sub-Bands, 0.2-30MHz Variable per Sub-band
Maximum Output Power	Uplink	24±2dBm
	Downlink	40±2dBm
Maximum Gain		90±3dB
Gain Adjustment Range		1 to 31 dB @ step of 1 dB
AGC		≥25dB
In-Band Ripple		≤ ±1.5dB
Frequency Stability		≤ ±0.01ppm
VSWR		≤ 1.5
Spurious Emission		9kHz to 1GHz: ≤ -36dBm
		1GHz to 12.75GHz: ≤ -30dBm
EVM		≤4.5%
ACRR		P≥31dBm (offset 5MHz): ≥33dB
		P≥31dBm (offset 10MHz): ≥33dB
Noise Figure		≤ 5dB
System Delay		≤ 4.5μs
I/O Impedance		50Ω
RF Connector		2x4.3-10 Female
Temperature Range		Operation: -25°C to + 55°C
Application		Indoor or Outdoor (IP65)
Relative Humidity Range		≤ 95% (non-condensing)
Power Supply		AC220±10%V,50/60Hz
Mounting		Pole or Wall Mount
Dimensions		447x357x171mm
Weight		≤17kg
Local Control		Via RJ45 Interface and Wi-Fi Hotspot



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

Operation Configuration	LED Display for status and alarm
Remote Monitoring and Alarm	NMS via internal 3G/4G modem, Supports SMS/SNMP
MTBF (Mean time between failures)	≥ 100,000 hours
Compliance Standards	
Standard	Fully comply with ETSI Standards: Safety : EN 60950 EMC : ETSI 301 489-50, ETSI 301 489-1, Rado: ETSI 301 908-11, ETSI 301 908-15 5G: ETSI TS 138 106
3GPP Standards	TS 25.106, TS 36,106, TS 138.106



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