

40dBm n78/B1 Dual-Band 2100-3500MHz Digital High Power FDD-TDD Repeater Model No: DHPR-1835-40W95



Features:

- Dual-Band with SW defined filter supporting spectrum reframing
- Very low NF with an excellent EVM
- IMOP Support (Isolation Measurement and Oscillation Protection)
- Supports 4G & 5G (NSA+SA modes) in the same unit
- 5G sync module ensures precise synchronization with the donor base station
- Digital bandwidth adjustable with one sub-band at N78 and 3 sub-bands at B3
- Utilizing intelligent algorithm to prevent UL interference
- Fully comply with ETSI & 3GPP standards with 40dBm composite power per band
- User-friendly GUI for the local setting via mobile app. or laptop
- Setting via EMTS mobile application using Wi-Fi connectivity or via USB

Introduction

The EMTS Telecom Services dual-band 2100/3500MHz Digital High-Power Repeaters (DHPR) offer an excellent solution for addressing poor signal coverage and is suitable for both coverage extension and indoor applications.

This product line repeaters are designed to support dual band 2100MHz FDD and 3500MHz TDD frequencies, accommodating both LTE and 5G technologies.

Equipped with an intelligent algorithm, the DHPR minimizes potential uplink interference and includes an isolation detection function to alert users when the distance between donor and service antennas is insufficient. Its easy installation and friendly GUI makes the DHPR an outstanding choice for enhancing signal strength, thereby improving the coverage and capacity of LTE/5G networks.

The EMTS DHPR enhances mobile network capacity and data coverage in areas with weak signals. It provides a cost-effective solution for indoor signal issues caused by architectural obstacles and signal attenuation. The simplicity of installation and maintenance ensures a quick return on investment for carriers.

The DHPR employs advanced digital technology, accessible via EMTS Mobile Apps or a direct USB connection. It features cutting-edge RF technology and digital modules to reduce power consumption and increase the MTBF's reliability, incorporating an IMOP algorithm to prevent self-oscillation, ensuring stable and reliable performance.



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:

Electrical Specifications			
System/Technology		5G NR N1	5G NR N78
Frequency Range	Uplink/Rx	1920~1980MHz	3450~3650MHz
	Downlink/Tx	2110~2170MHz	3450~3650MHz
Bandwidth(Digital Filter for N1 Band)		1-30MHz Variable	100MHz Fixed Bandwidth (Movable Center Frequency)
Composite Output Power	Uplink/Rx	23±2dBm per Band	
	Downlink/Tx	40±2dBm per Band	
Maximum Gain	Uplink/Rx	90±3dB per Band	
	Downlink/Tx	90±3dB per Band	
MGC (Step Attenuation)		≥30dB	
Gain Control Accuracy		1~20dB @ ±1dB, > 20dB @ ±1.5dB	
AGC/ALC		≥15dB	
Gain Flatness		≤±3	
Spurious Emission		9KHz~1GHz: ≤ -36dBm	
		1GHz~12.75GHz: ≤-30dBm	
Frequency Stability		≤ ±0.01	
Adjacent-Channel Rejection Ratio (ACRR)		≤ -45dBc	
EVM		≤ 4.5%	≤ 3.5%
Peak Code Domain Error (PCDE)		≤ -35dB	
VSWR		≤1.5	
Noise Figure		≤4dB	
System Delay		≤ 4.5μs	
Max Input Power (No Damage)		≤ 10dBm	
Power Supply		Input:AC220V, 50/60Hz	
Power Consumption		≤250W	



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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Mechanical Specifications

RF Connector	2*4.3-10 Female(1 BTS Port and 1 MS Port)
Dimensions	500*440*187mm
Weight	≤30kg
IP Rating	IP65
Mounting	Wall Mounting

Environmental Specifications

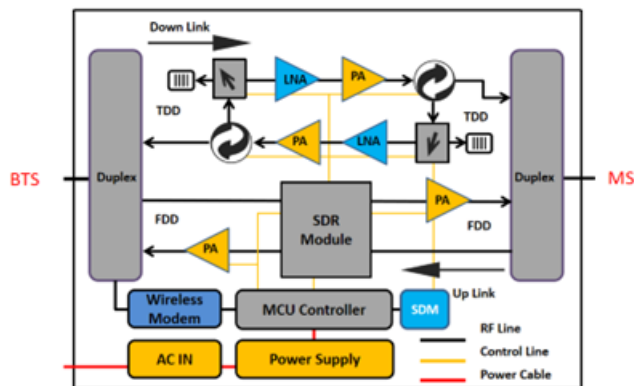
Operating Temperature	-20 ~ +55 °C
Relative Humidity Range	≤95% (Non Condensing)
MTBF	≥ 100,000 Hours

Monitoring

Operation Configuration	LED Display for status and alarm, PC RJ45Port, Local WIF functionality for easy setting and alarming
Remote Monitoring and Alarm (optional)	NMS via internal 4G modem, Supports SMS/SNMP real-time status and alarm reporting Remote configuration

Certification and standards

Standard	Comply with CE and 3GPP ETSI Standards: Safety: EN 60950 EMC : ETSI 301 489-50, ETSI 301 489-1, Radio: ETSI TS 138 115, ETSI TS 36 143
Certification	CE Comply



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