

4G/5G n78/B41 40dBm Dual-Band 2500-3500MHz Digital High Power TDD Repeater Model No: DHPR-2535-40W95



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) n78 & B41 in the same unit
- 4G/5G sync module ensures precise synchronization with the donor base station
- Digital bandwidth adjustable with one sub-band at n78 and one sub-band at B41
- 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 2500/3500MHz 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 2500MHz TDD 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 make 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 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 Wireless Networks.

Technical Specifications:

Electrical Specifications			
		B41 (2500)	n78 (3500)
Frequency Range	Uplink	2496 - 2690 MHz (adjustable)	3300 - 3600 MHz (adjustable)
	Downlink	2496 - 2690 MHz (adjustable)	3300 - 3600 MHz (adjustable)
Number of Sub-bands		1	1
Bandwidth		≤ 190 MHz (adjustable)	≤ 100 MHz (adjustable)
Max. Gain	Uplink	$\geq 90 \pm 2$ dB	$\geq 90 \pm 2$ dB
	Downlink	$\geq 95 \pm 2$ dB	$\geq 95 \pm 2$ dB
Manual Gain Control		31 dB in step of 1 dB	
Automatic Gain Control		≥ 20 dB	
Gain Flatness (per sub-band)		$\leq \pm 3$ dB (peak-to-peak)	$\leq \pm 3$ dB (peak-to-peak)
Max. Input Power Without Damage		0 dBm	
Output Power	Uplink	$\geq 27 \pm 1$ dBm	$\geq 27 \pm 1$ dBm
	Downlink	$\geq 40 \pm 1$ dBm	$\geq 40 \pm 1$ dBm
Out of Band Gain		Comply with 3GPP	Comply with 3GPP
Spurious Emission	9KHz-1GHz	≤ -36 dBm	
	1GHz-12.75GHz	≤ -30 dBm	
ACRR	$\pm 20/100$ MHz	≤ -36 dBc/30KHz	≤ -36 dBc/30KHz
	$\pm 40/200$ MHz	≤ -40 dBc/30KHz	≤ -40 dBc/30KHz
EVM		$\leq 8\%$	$\leq 3.5\%$
Frequency Stability		$\leq \pm 0.01$ ppm	$\leq \pm 0.01$ ppm
Noise Figure		3.5 dB	
VSWR		≤ 1.5	
System Delay		≤ 4.5 μ s	



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 & Environmental Specifications

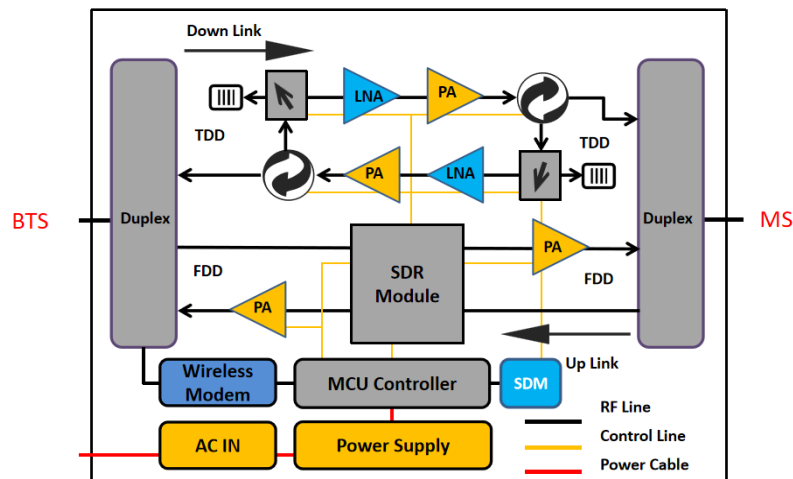
Dimensions	450*315*180 mm
Weight	≤25kg
Mounting Kit	Included Wall / Pall
Grounding kit	Included
Operating temperature	-20° to +55°C
Standard against dust and water	IP65
Relative humidity	≤95%
RF connectors	N-Type (optional 7/16 DIN Female or 4.3-10)
MTBF (Mean time between failures)	≥ 100000 hours

Monitoring

Operation Configuration	LED Display for status and alarm, PC RJ45 Port, 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 ETSI Standards: Safety: EN 60950 EMC : ETSI 301 489-50, ETSI 301 489-1, Radio: ETSI 301 908-11, ETSI 301 908-15 and ETSI TS 136 106 V15.0.0 / ETSI TS 136 143 V15.0.0
Certification	CE Comply



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