

20dBm 1800-3500MHz 4G/5G Dual-Band Digital Mini Repeater Model No: DMR-1835-20W75



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 20dBm 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 1800/3500MHz Digital Mini Repeaters (DMR) 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 1800MHz FDD and 3500MHz TDD frequencies, accommodating both LTE and 5G technologies.

Equipped with an intelligent algorithm, the DMR 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 DMR an outstanding choice for enhancing signal strength, thereby improving the coverage and capacity of LTE/5G networks.

The EMTS DMR 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 DMR 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			
		B3 (1800)	N78 (3500)
Frequency Range	Uplink	1710 - 1785 MHz (adjustable)	3300 - 3600 MHz (adjustable)
	Downlink	1805 - 1880 MHz (adjustable)	3300 - 3600 MHz (adjustable)
Number of Sub-bands		1-3	1
Bandwidth		≤ 75 MHz (adjustable)	≤ 100 MHz (adjustable)
Max. Gain	Uplink	$\geq 70 \pm 2$ dB	$\geq 70 \pm 2$ dB
	Downlink	$\geq 75 \pm 2$ dB	$\geq 75 \pm 2$ dB
Manual Gain Control		31 dB in the step of 1 dB	
Automatic Gain Control		≥ 20 dB	
Gain Flatness (per sub-band)		$\leq \pm 1.5$ dB	$\leq \pm 2$ dB
Max. Input Power Without Damage		0 dBm	
Output Power	Uplink	$\geq 20 \pm 1$ dBm	$\geq 20 \pm 1$ dBm
	Downlink	$\geq 20 \pm 1$ dBm	$\geq 20 \pm 1$ 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		≤ 7 dB	
VSWR		≤ 1.8	
System Delay		≤ 4.5 μ s	
RF Connector		N-Female	
Impedance		50 Ω	
Power Supply		An external Power Supply AC 90-240 V, 50/ 60 Hz	
Power Consumption		≤ 60 W	



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

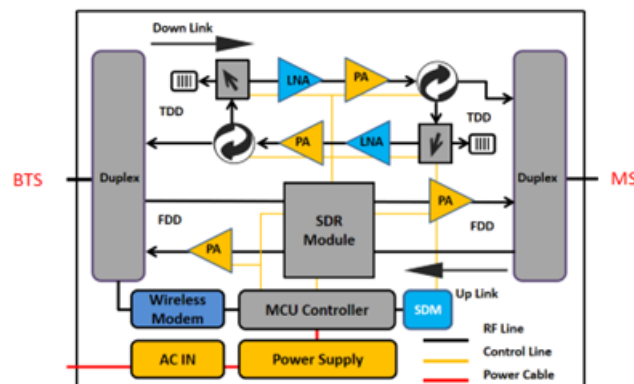
Dimensions	200*198*82mm
Weight	≤8kg
Mounting Kit	Included Wall / Pall
Grounding kit	Included
Operating temperature	-20° to +55°C
Standard against dust and water	IP40 (optional IP65)
Relative humidity	≤95%
RF connectors	N-Type (optional 4.3-10)
MTBF (Mean time between failures)	≥ 150000 hours

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 3G/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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