

20dBm LTE 1700MHz High-Quality Band 4 Band Selective Mini Repeater

Model No: MR-17-20W85



Features:

- Fully comply with GSM-LTE standard supports the 1700 MHz band 4
- User-friendly front panel control & plug and play installation - the repeater status can be known during installation.
- A smart function can be activated via the front panel, preventing UL interference and self-oscillation, and automatically keeps optimal condition
- Isolation detection function - Auto Isolation check between service and donor antennas to eliminate the self-oscillation
- Smart Automatic Level Control (ALC) ensures stable output level and continuous adjustment
- Low power consumption with (optional) sleeping mode (saving power)
- Linear power amplification with an extremely low EVM and (optional) 5G support
- Optional digital module supporting multiple sub-bands, 5,10, 20 and 25 MHz blocks
- Simple installation with external AC/DC adapter
- Optional remote monitoring and alarm using 4G internal modem

Introduction

The EMTS Telecom Services LTE Band Selective Mini-Repeater is an integral part of the LTE network deployment. It extends the coverage by receiving processes and amplifying the RF signal. The single-band LTE-1700 MHz is 20dBm mini-Repeater providing an affordable solution to solve the indoor signal coverage problems in LTE 1700MHz systems. In many case, due to signal fading and attenuation caused by architecture obstacles, the signal strength is weak. The EMTS mini-repeater and its easy installation & maintenance can help carriers get a faster return on investment. The repeater works as a relay between the BTS and mobiles. It picks up the strongest signal from BTS via the donor antenna, linearly amplifies the signal, and then retransmits it via the indoor signal distribution system to the weak/blind coverage area. The mobile signal is also amplified and retransmitted to the BTS in the opposite direction. The repeater can be provided in two versions, tunable band selective and fix band (factory set) types. The band-selective function can choose to amplify the signal within the customized band. The EMTS LTE Pico Repeater is designed explicitly for in-building LTE applications. It supports different LTE channel bandwidths (1.4, 3, 5, 10, 15 & 20MHz) and can meet any future LTE channel allocation need.



EMTS Telecom Services 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

Items		Specifications
System		WCDMA / LTE / 5G
Frequency Range	Uplink	Type I: 1710 - 1755 MHz Type II: 1710 - 1770 MHz (Fixed band – factory set or digital band selective)
	Downlink	Type I: 2110 - 2155 MHz Type II: 2110 - 2170 MHz (Fixed band – factory set or digital band)
Bandwidth		1.4, 3, 5, 10,15,20MHz Selected from the GUI and can be set across the whole band
Output Power	Uplink	20±2dBm (optional low power type with 13dBm)
	Downlink	20±2dBm (optional low power type with 13dBm)
Gain	Uplink	90±3dB
	Downlink	90±3dB
AGC&MGC Range		≥20dB
In-Band Ripple		≤±2dB
Noise Figure		≤6dB
VSWR		≤2.0
Maximum Input Power		0dBm
System Delay		≤5μs
I/O Impedance		50 Ω
Spurious Emission		9kHz~1GHz: ≤ -36dBm
		1GHz~12.75GHz: ≤-30dBm
EVM		≤8%
RF Connector		N-Type (Female)
Power Supply		Input AC100~ 240V
Dimensions		Indoor type 184X150X40mm
Weight		≤3kg
Application		Indoor
Alarm Monitoring System		Alarm for Uplink Self-Oscillation
Isolation Detection		Isolation Check During Boot-Time
LED Indicator		Power Supply, Alarm, State
Operating Temperature		-20 to +45 °C
Relative Humidity Range		≤95% (No Condensing)
MTBF		100,000 hours

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.

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Comply with standards	
ETSI Standards	Fully comply with ETSI Standards: Safety: EN 60950 EMC : ETSI 301 489-50, ETSI 301 489-1, Radio: 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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