



TURNING TECHNOLOGY INTO SOLUTIONS

20dBm LTE/WCDMA 1800MHz Band Selective Tunable Mini Repeater

Model No: MR-18-20W80-TB-C



Features:

- **20dBm Downlink composite power with High system gain**
- **Fully comply with the WCDMA/LTE standards**
- **Advanced filtering technology with sharpened out band rejection**
- **Linear power amplification to effectively suppress inter-modulation and spurious emission**
- **Intelligent design with built-in ALC function provides auto amplitude fixing and noise reduction to the LTE or WCDMA BTS**
- **VSWR protection mechanism**
- **Unique color LEDs to indicate power supply and state and alarm**
- **Oscillation preventing mechanism**

Introduction

The EMTS Telecom Services Ltd. 1800MHz Mini Repeaters (MR) provides an excellent solution to the problem for poor indoor signal coverage. The MR utilized RF/IF technology, that can automatically detects VSWR of Donor and Services Antennas in real time by adopting advance technology. The MR frequency band can be tuned true USB port form 0 to 30MHz. The Mini Repeater provides an affordable solution to solve the indoor signal coverage problems due to signal fading and attenuation caused by architecture obstacles. Its easy installation and maintenance can help carrier get fast return. The repeater is working 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 via the opposite direction.



EMTS Telecom Services 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.

Electrical Specification

	Uplink	Downlink
Frequency Range	1805-1835MHz	1710-1740MHz
Gain	80 +/- 3dB	80 +/- 3dB
Bandwidth	Two Tunable Band selective 0~30MHz Optional: Two Blocks	
Frequency Error	≤±0.5ppm	
Gain Control Range	1~31dB @ step of 1dB	
AGC control range	≥20dB	
RF Output Power	20Bm	20dBm
Noise Figure	≤6dB	
Group Delay	≤5us	
Interference Cancellation Range	≥30dB(Antenna Isolation +15dB)	
In band Ripple	+/- 2.5 dB max	
ACRR	≥20dB@5MHz; ≥20dB@10MHz	
EVM	≤12.5%	
PCDE	≤-35dB	
Spurious emission	≤-36dBm/30KHz@9KHz-1GHz ≤-30dBm/30KHz@1GHz-12.75GHz	
VSWR	≤2:1	
Power Supply	Input AC100~ 240V, output DC9V 50 Watts	
Protection	The downlink output will be protected against open or short	
Size	265*318*68 mm	
Weight	9Kg	
Operating temperature	-20° to +55°C	
Relative humidity	≤95%	
RF connectors	N-Type	
Application	Indoor(IP30)	
Local Control Port	USB	
Indication LED	Power supply, Alarm, state	
Alarm Monitoring System	Alarm for uplink self-oscillation	
Standard	Fully comply with UMTS 3GPP and LTE standard: TS 125 143 - V13.0.0 (2016-01) and ETSI EN 301 908-11 V11.1.1 (2016-05)	



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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without notice