

High Selectivity Tunable Bandwidth AWS 1700MHz Power Repeater

Model No: PR-17-30W85-TB



Features

- Fully comply with ETSI HSPA and LTE standards.
- High system gain with 30dBm composite power
- Bandwidth of 1.4, 3, 5, 10, 15 or 20MHz selected by the GUI
- Linear power amplification to effectively suppress inter-modulation and spurious emission designed to meet LTE modulation.
- Smart Automatic Level Control (ALC) ensures output level stable and adjustable continuously.
- Remote & Monitoring via wireless modem.
- The efficient thermal characteristics, careful component selection and robust design result in high system reliability.

Introduction

The EMTS Telecom Services AWS Band Selective Tunable Bandwidth Power Repeater is an important part of the LTE network deployment. It extends the Node B coverage by receiving processes and amplifying the RF signal. The single-band AWS-1700 30 dBm Power Repeater provides an affordable solution to solve the indoor signal coverage problems in LTE /WCDMA 1700 MHz systems. Due to signal fading and attenuation caused by architecture obstacles the signal strength is weak, The EMTS Power Repeater and its easy installation & maintenance can help carrier get faster 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 and the mobile signal is also amplified and retransmitted to the BTS via the opposite direction. The band-selective function can choose to amplify the signal within the customized band. The EMTS LTE Power Repeater is specifically designed for inbuilding LTE applications. It supports up to 12 LTE BW (1.4, 3, 5 , 10 ,15 ,20MHZ) channels and can meet the needs of any future LTE channel allocation.



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

Items	Uplink	Downlink
Frequency Band	Type I: 1710 - 1755 MHz Type II: 1710 - 1770 MHz	Type I: 2110 - 2155 MHz Type II: 2110 - 2170 MHz
Gain	85 ± 2 dB	85 ± 2 dB
Bandwidth	1.4, 3, 5, 10, 15 ,20 MHz Selected from the GUI and can be set across the whole band	
Manual Gain Control	31dB in step of 1dB	
Automatic Gain Control (AGC)	>20dB	
Ripple in Band	± 2.5 dB typ. For full band Narrow Band ± 1.5 dB typ.	
Max. Input Power Without Damage	-10 dBm	
Composite Output Power	24 dBm	30 dBm
Conformance Standard	3GPP TS 36.106 version 9.0.0	
Frequency Stability	≤0.05ppm	
Noise Figure @ max. gain	≤5 dB	
VSWR	1.5:1	
Time Delay	7μs maximum	
Power Supply	220 VAC	
Power Consumption	100 W	
Impedance	50 Ohm	
Remote & Control	Via HSPA modem	

Mechanical Specification

RF Connector	N-Female
Switch	Power Switch Manual Gain Control Switch
Dimensions (D x W xH)	351 X 460 X146 mm
Weight	16Kg
Environment Conditions	IP65
Color	Black
Humidity	< 90%
Operating Temperature	-30 – 55 °C



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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