

30dBm LTE700MHz High-Quality Band 28 Band Selective Power Repeater

Model No: PR-7-30W90



Features:

- Fully comply with LTE /5G ETSI and 3GPP standards for band 28 RF Repeaters
- Plug and play installation- the repeater status can be known during installation.
- An intelligent function preventing UL interference and self-oscillation automatically keeps an optimal condition activated from the local GUI
- 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
- IP 67 enclosure for indoor or outdoor installation
- Linear power amplification with an extremely low EVM and an option supporting 5G
- An optional digital module supporting multiple sub-bands,5,10,20,25MHz per block
- Simple installation with an external AC/DC adapter
- Option for remote monitoring and alarm using 4G internal modem

Introduction

The EMTS Telecom Services LTE Band Selective Power-Repeater (PR) is integral to the LTE/5G network deployment. It extends the coverage by receiving processes and amplifying the RF signal. The single-band LTE/5G-700 MHz is 30dBm Power-Repeater providing an affordable solution to solve the indoor signal coverage problems in LTE/5G700MHz systems. Due to signal fading and attenuation caused by architecture obstacles, the signal strength is weak; our Power-Repeater and its easy installation & maintenance can help carriers get a faster return. 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 it, and then retransmits it via the Indoor Signal Distribution System to the weak/blind coverage area. The mobile signal is amplified and retransmitted to the BTS in the opposite direction. Selective and fixed band (factory set) types are provided for two tunable bands. 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/5G applications. It supports different LTE/5G channel bandwidths (1.4, 3, 5, 10, 15, 20, 25MHz)



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		LTE700 (5G optional)
Frequency Range	Uplink	703 – 748MHz
	Downlink	758 – 803MHz
Bandwidth		Digital band selective with multiple blocks 5,10,15,20,25 MHz
Output Power	Uplink	24±2dBm
	Downlink	30±2dBm
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%
		An option for 5G with 4.5% EVM
RF Connector		N-Type (Female) Or 4.3-10
Power Supply		Input AC100~ 240V
Dimensions		Indoor type 184X150X40mm
Weight		≤12kg
Application		Outdoor / 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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TURNING TECHNOLOGY INTO SOLUTIONS

Compliance Standards	
Standard	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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