EMTS
Telecom Services
TURNING TECHNOLOGY INTO SOLUTIONS

900-1800-2100MHz High Power LTE & WCDMA 40dBmTriple Band Selective ICS Repeater

Model No: IHPR-91821-40W95

Features:

- **Supports LTE and WCDMA technologies with advanced filtering technology.**
- **Fully comply with 3GPP ETSI and TS-136 standards.**
- **Advanced Digital ICS technology - function to prevent self-oscillation, enhance gain and coverage range and reduce isolation requirement for selectable band.**
- **Very low uplink noise – an excellent solution to extend BTS coverage range for Outdoor or In-Building deployments for single or multi operator uses.**
- **Real Time Interference Signal Cancellation (Multi-path Fading, Feed-Back signal)**
- **ICS technology enabling operation with low Isolation**
- **Linear power amplification to suppress inter-modulation and spurious emission**
- **Smart Automatic Level Control (ALC) ensures a stable output level**
- **Local alarm via visual LED enables an easy installation.**
- **Remote monitoring & alarm via WIFI, 3G/4G modem supports SMS/SNMP.**

Introduction

The EMTS Telecom triple Band Selective High-Power ICS Repeater (HPRI) provides an excellent solution to the problem of poor signal coverage by conveying coverage extension for in building & outdoor applications. The HPRI designed to support signal coverage for LTE bands 900, 1800 and WCDMA 2100MHz. The ICS Repeater is designed to provide a more cost-effective solution than adding a new Base Transceiver Station (BTS) to improve signal coverage and communication quality in Mobile system. And its easy installation and maintenance can help carriers get fast return. The repeater is working as a relay between the BTS and mobiles. It receives the low-power signal from BTS via the Donor Antenna, linearly amplifies the signal and then retransmits it via the Coverage Antenna to the weak/blind coverage area. And the mobile signal is also amplified and retransmitted to the BTS via the opposite direction. The HPRI is also improving the capacity of the cellular network and the data coverage in areas with limited signal strengths. The unit is connected to an outdoor donor antenna using a coaxial cable. The donor antenna transmits signals from mobile phones and receives signals from the BTS. Service antennas are placed in dead zones or in the tower for outdoor applications.

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.

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Technical Specifications

Items		Specifications		
System		LTE900	LTE1800	UMTS2100
Frequency Range (Selectable band)	Uplink	880-815 MHz	1710-1785 MHz	1920-1980 MHz
	Downlink	925-960 MHz	1805-1880 MHz	2110-2170 MHz
Composite RF Output Power	Uplink	30±2dBm	30±2dBm	30±2dBm
	Downlink	40±2dBm	40±2dBm	40±2dBm
Gain		95±3dB		
MGC&AGC Range		1-31dB @ Step of 1dB		
VSWR		≤ 1.5		
In-Band Ripple		≤ 3dB		
Group Delay		≤4.5us		
Interference Signal Cancellation Capacity		≥30dB (Antenna Isolation +15dB)		
Interference Signal Detecting Range (Direct & Multi-path Feedback)		≤ 7.0μs		
Maximum Input Power (Non-Destructive)		0dBm		
ACRR		P ≥ 31dBm (Offset 5MHz): ≥ 33dB		
		P ≥ 31dBm (Offset 10MHz): ≥ 33dB		
Out of Band Gain (DL/UL)		2.7 ≤ f_offset <3.5MHz: ≤ 60.5 dB		
		3.5 ≤ f_offset <7.5MHz: ≤ 45.5 dB		
		7.5 ≤ f_offset <12.5MHz: ≤ 45.5 dB		
		12.5 MHz ≤ f_offset: ≤ 35.5 dB		
Spurious Emission		9kHz~1GHz: ≤ -36dBm/30kHz		
		1GHz~12.75GHz: ≤ -30dBm/30kHz		
Frequency Stability		≤ ±0.01ppm		
Noise Figure		≤ 6dB		
I/O Impedance		50Ω		
RF Connector		N-Female		

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.

Temperature Range	Operation: -20°C ~ + 55°C
Relative Humidity Range	≤ 95% (Non-Condensing)
Application	Indoor or Outdoor (IP65)
Mounting Kit	Included Wall & Pall
Grounding Kit	Included
Protection	Downlink Output will be Protected Against Open/Short
Backup Battery Supply (Optional)	4Hours
Dimensions	500mm X 440mm X 235mm
Weight	≤ 45Kg
LED Indicator	Power Supply, Alarm, Running
Power Supply	AC 220V, 50Hz
Power Consumption	≤ 450W
Local Control	Via RJ45 Interface and WiFi Hotspot
NMS Mode	Wireless Modem(3G/4G),IP Connectivity
NMS Function	Real-time Alarm for Door Status, Temperature, Power Supply, VSWR Remote Control as Turn On/Off, Increasing/Decreasing Output Power. Real-time Status for Output/Input Power, UL/DL Gain, All Status of Repeater.
MTBF (Mean time between failures)	≥ 80000 hours

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