

High Selectivity SMR 700-800MHz High Power Repeater Model: HPR-70-80-40W90



Features

- Superior RF performance & efficiency, Supports SMR 700-800 MHz
- Dual or Sigle block configuration at the SMR 850 MHz band
- Downlink 40dBm composite power (35dBm per band)
- High Gain and low Noise Figure
- Advanced ALC & PLL technology, high stability and reliability
- Comply with SMR APCO25, iDEN and LTE standards.
- Easy installation, operation and maintenance
- Remote monitoring via GPRS modem
- Light weight, compact Size and High Performance
- Intelligent design, with built-in ALC function

Introduction

The EMTS Telecom Services 700-800MHz, 40dBm High Power-Repeaters provide an excellent solution to the problem of poor signal coverage. The Power-Repeaters amplify the signals from the handset and base stations and can be used in dead areas where service is poor. The High Power-Repeater is connected to an outdoor 'donor' antenna using a coaxial cable. The donor antenna transmits signals from the handset and receives signals from the BTS. Service antennas are placed in dead zones. Easy installation, lightweight design and easy usage make our 700-800MHz Repeater a cost-effective and practical solution for extending signal coverage for indoor or Outdoor applications.



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 Specifications

NO. Items Downlink Uplink 1 Tree groups (Range Trequency Range Trequencies is for example only, can set any band configuration Band 1 766MHz~767MHz 796MHz~797MHz 2 Output Power (Max) 866MHz~869MHz 821MHz~824MHz 3 Max Gain 90±3dB 90±3dB 90±3dB 4 Gain Modulation Range 30dB 30dB 5 5 Gain Modulation Step 1dB 90±3dB 90±3dB 6 Gain Modulation Bror S5dB S5dB 5dB 7 Noise Factor S5dB S5dB S5dB 8 Max NO Damage Input Power -10dBm -10dBm 9 Automatic Level Control (ALC) Output power variation <2dB or be off when adding 10dB at max output power. Control range>30dB 10 Pass Band Ripple ≤3dB 5dBm/3kHz or ≤0dBc/3kHz 13 Spurious Emissions In-Band <3dBm/3kHz or ≤0dBc/3kHz 14 MD Out-Band(Deviation from the band edge outside 2.5MHz) 1GHz~12.75GHz i <3dBm 13 Spurious Emissions In-Band <45dBc/30kHz 14 MD	NO	Transa -		Parameters		
The 800 MHz Band 2 $851MHz \sim 850MHz$ $806MHz \sim 811MHz$ 1 frequencies is for example only, can set any bend configuration Band 3 $866MHz \sim 869MHz$ $821MHz \sim 824MHz$ 2 Output Power (Max) 40:2dBm (total) $33\pm2dBm$ (total) 3 Max Gain $90\pm3dB$ $90\pm3dB$ $90\pm3dB$ 4 Gain Modulation Range $30dB$ $30dB$ 5 Gain Modulation Step IdB $30dB$ 6 Gain Modulation Error $30dB$ $30dB$ 7 Noise Factor $\leq 5dB$ $\leq 5dB$ 8 Max NO Damage Input Power $-10dBm$ $-10dBm$ 9 Automatic Level Control (ALC) Output power variation < 2dB or be off when adding 10dB at max output power. Control range $\geq 30dB$. 10 Pass Band Ripple $\leq 3dB$ ≤ 1.5 12 Time Delay ≤ 1.5 $\leq 3dB$ 13 Spurious Emissions In-Band $\leq 43dB/30kHz$ $\leq 3dB/30kB/30kHz$ 14 IMD In-Band $\leq 43dB/30kHz$ $\leq 3dB/30kB/30kHz$ 14 IMD In-Band $\leq 30dB/30kHz$ $\leq 43dB/30kHz$ <td>NO.</td> <td colspan="3"></td> <td>Downlink</td> <td>Uplink</td>	NO.				Downlink	Uplink
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any band configuration Band 3 6000000000000000000000000000000000000			or	Band 2	851MHz~856MHz	806MHz~811MHz
2 Output Power (Max) $35\pm 2dBm/band$ $28\pm 2dBm/band$ 3 Max Gain $90\pm 3dB$ $90\pm 3dB$ 4 Gain Modulation Range $30dB$ 5 Gain Modulation Step 1dB 6 Gain Modulation Error While gain is $0.20dB$, Error<1dB; While gain is $21-30dB$, Error<10dB; Modulation Error				Band 3	866MHz~869MHz	821MHz~824MHz
3 Max Gain 35±2dBm/band 28±2dBm/band 3 Max Gain 90±3dB 90±3dB 4 Gain Modulation Range 30dB 5 Gain Modulation Step 1dB 6 Gain Modulation Error While gain is 0-20dB, Error≤1dB; While gain is 21- 30dB, Error≤1dB; While gain is 21- 30dB 7 Noise Factor ≤5dB ≤5dB 7 Noise Factor SdB ≤5dB 9 Automatic Level Control (ALC) Output power variation < 2dB or be off when adding 10dB at max output power. Control range≥30dB. 10 Pass Band Ripple ≤3dB 11 VSWR ≤1.5 12 Time Delay ≤13.0µs 13 Emissions In-Band ≤-36dBm/3kHz or ≤60dBc/3kHz 14 IMD In-Band ≤-36dBm 15 Rejection Out of band ≤30dBc@±1MHz 16 Power Consumption ≤125W 17 Local Monitoring & Control RE322 18 RF Connection Mode N/F,50Q 19 Powe	2	Output Power	(Max)			
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Image: bit means on one pair of the pair is 0 - 20dB, Error $\leq 1dB$; While gain is 0 - 20dB, Error $\leq 1dB$; While gain is 21-30dB, Error $\leq 1.5dB$ Gain Modulation Error $\leq 5dB$ $\leq 5dB$ 7 Noise Factor $\leq 5dB$ $\leq 5dB$ 8 Max NO Damage Input Power $-10dBm$ $-10dBm$ 9 Automatic Level Control (ALC) Output power variation $< 2dB$ or be off when adding 10dB at max output power. Control range $\geq 30dB$. 10 Pass Band Ripple $\leq 3dB$ 11 VSWR ≤ 1.5 12 Time Delay ≤ 1.5 13 Spurious Emissions In-Band $\leq -36dBm/3kHz$ or $\leq -60dBc/3kHz$ 14 MD In-Band $\leq -36dBm/3kHz$ $\leq -30dBm$ 14 IMD In-Band $\leq -45dBc/30kHz$ $\leq -30dBm$ 15 Rejection Out of band $\leq -30dBm = \pm 30dBm$ $\leq -30dBm = \pm 30dBm$ 16 Power Consumption $\leq 1.25W$ $\leq -30dBm = \pm 30dBm$ 17 Local Monitoring & Control RS232 Rs232 Rs232 18 RF Connection Mode N/F,50Ω N/F,50Ω $\leq 95\%$ $\leq 25\% C \sim +55\% C$ ≤ 21 Relative humidity	4	Gain Modulation Range			30dB	
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19Power Supply ModeAC $220V\pm20\%,50\pm5Hz$; Europe Standard20Operating Temperature $-25^{\circ}C \sim +55^{\circ}C$ 21Relative humidity $\leq 95\%$ 22Weight - Casing class - Mounting $\leq 35 \text{kg} / \text{IP65} / \text{Wall or Pole Mounting}$	17	Local Monitoring & Control			RS232	
20Operating Temperature $-25^{\circ}C \sim +55^{\circ}C$ 21Relative humidity $\leq 95\%$ 22Weight - Casing class - Mounting $\leq 35 \text{kg} / \text{IP65} / \text{Wall or Pole Mounting}$	18	RF Connection Mode			Ν/F,50Ω	
21 Relative humidity ≤95% 22 Weight - Casing class - Mounting ≤35kg / IP65 / Wall or Pole Mounting	19	Power Supply Mode			AC 220V±20%,50±5Hz; Europe Standard	
22 Weight - Casing class - Mounting ≤35kg / IP65 / Wall or Pole Mounting	20	Operating Temperature			-25°C \sim +55°C	
	21	Relative humidity		≤95%		
23 Dimension 257	22	Weight - Casing class - Mounting		≤35kg / IP65 / Wall or Pole Mounting		
20 25 /mm×45 3mm (W*H*L)	23	Dimension			357mm×217mm×453mm (W*H*L)	



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.

All rights reserved Note: All specifications subject to change without notice.





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