

# TMB SMR 850 MHz Multi Carrier High Power Outdoor Boosting System

Model No: TMB-M-850S-0-50W15

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## Features:

- Employed best advanced pre-distortion and feed-forward technology
- Support multi-carrier LTE (FDD) with high system efficiency
- 100 W Downlink output power, supports multi-carrier amplifier.  
(Lower or Higher Power types are also available)
- Support flexible downlink input either duplexed or un-duplexed
- Support system full diversity
- Downlink and uplink gain adjustable with wide dynamic range
- Lower uplink noise figure
- Comprehensive product monitoring and control (local and remote);
- Centralized system control/display/alarms, Great system reliability supported by architecture built-in redundancy (Optional)
- All Models available operating power of 220/110VAC or -48VDC
- Extensive protection for lightning, voltage surge,
- Compact system size and light weight

## Introduction

Wireless operators have used multi-carrier power amplifiers (MCPA) to increase the coverage and capacity of existing base stations. The use of MCPA has increased operator revenues without the excessive costs of adding or swapping out equipment and with no need to build additional cell sites.

The Multi-Carrier High Power Booster system provides higher downlink EIRP and improved uplink sensitivity at the same time to extend the coverage of existing networks.

This multi-carrier based product platform can also work with customized BTS to extend capacity of original BTS with a low system total cost. Our MCPA product line (Tower-Mounted and Floor-Mounted) provides cost effective network coverage extension and capacity upgrade solution.

The multi-carrier based product platform can also work with customized BTS to extend capacity of original WCDMA BTS with a low system total cost. The unit is also available for different Cellular bands: GSM, DCS, PCS & UMTS and support multi-carrier GSM/EDGE, LTE, and WCDMA signals, with mixed mode.



**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.

## Technical Specification

Electrical Specifications		
Frequency range Or any partial band	Uplink	806 - 824 MHz
	Downlink	851 - 869 MHz
Output power	Uplink	≥12dBm & Output IP3 (max gain) >23 dBm
	Down	50 ±1dBm (Lower or Higher Power types are also available)
Gain	Uplink	15±1dB
	Down	15±1dB
Max Input Power		43dBm
Ways numbers		2 inputs, 2 outputs
Supporting Carriers / way		2/4/8 carriers
Bypass insertion loss		≤2.0dB
Input / output voltage standing wave ratio		≤1.5
Uplink noise figure		≤ 2dB
Downlink intermodulation attenuation		-55dBc typ.
Spurious emission		≤-36dBm @9KHz-1GHz
		≤-30dBm @1G-12.75GHz
		≤-47dBm @ 825-835MHz
		≤-47dBm @870-880MHz
		≤-47dBm @1800-1920MHz
		≤-47dBm @3.4G-3.52G
Gain adjustment range		15dB
		<+/-1dB Gain Variation Over Temp <+/-1dB
Band fluctuations		10:1
Load mismatch against		AC220V±20%, 45~55Hz
Power supply		
Mechanical Specifications		
Dimensions (L * W * H) (mm)		730*440*330
Net weight (kg)		45
Gross weight (kg)		50
Cooling		Forced air cooling
Input and output impedance		50Ω
Environmental Specifications		
Operating temperature		-40°C to 55°C
Humidity		≤95%
Protection class		IP65



### 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 - Specifications are subject to change without notice

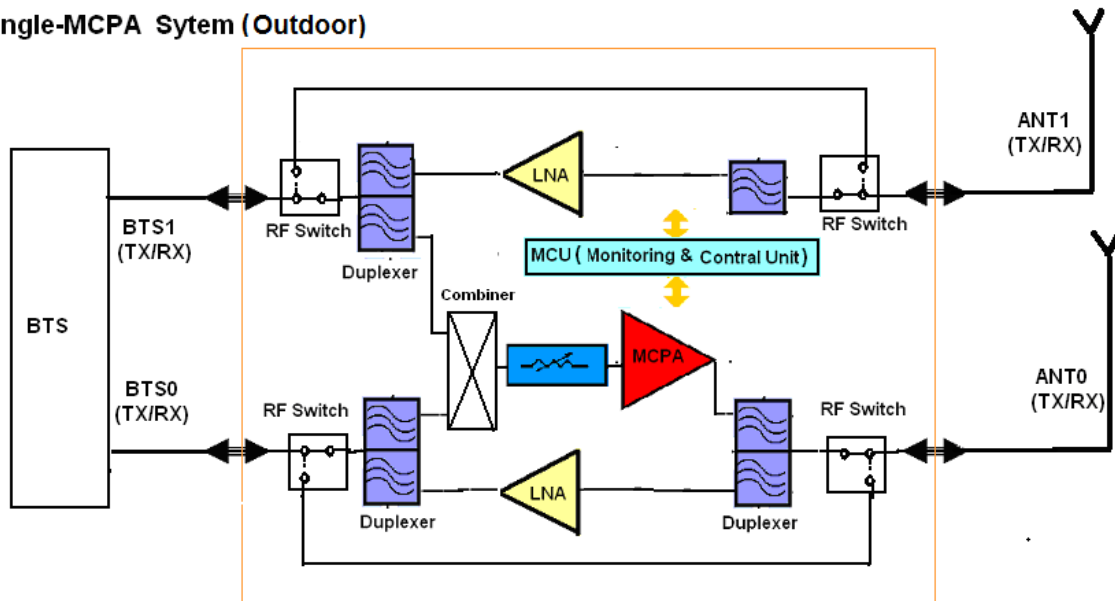
**Note: All specifications subject to change without notice.**

## Technical Specification (Cont.)

Monitoring features	
Local / remote monitoring	Local: DB-9 RS232 serial port Remote: Wireless MODEM via SMS (SMS)
Others Specifications	
EMC	ETS 300 342-3
Lightening	IEC-1312-1
Connectors	For RF7/16 DIN female / For Alarm pull push mail
MTBF	100,000 hours

## Diagram of TMB System

Figure 1: Single-MCPA System (Outdoor)



### Ordering Information:

For full band cellular use Model No: TMB-M-850-O-50W15



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