

TMB AWS 1700 MHz Multi Carrier High Power Outdoor Boosting System

Model No: TMB-M-1700-O-50W15



Features:

- Employed best advanced pre-distortion and feed-forward technology
- Support multi-carrier WCDMA with high system efficiency
- 100 W Downlink output power, supports multi-carrier amplifier (Lower / 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 (TMB) 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: 450 MHz, 800 MHz, 900 MHz, AWS-1700 MHz, DCS 1800 MHz, PCS-1900 MHz, UMTS-2100 MHz and 2600 MHz 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 Specifications

| Electrical Specifications | | |
|--|----------------------|---|
| Frequency range | Uplink | Type A :1710-1755 MHz Type B 1710-1770 MHz |
| | Downlink | Type A: 2110 – 2155 MHz Type B: 2110-2170 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 |
| | ≤-98dBm @ 885-915MHz | |
| Gain adjustment range | | 15dB |
| Band fluctuations | | < +/-1dB Gain Variation Over Temp < +/-1dB |
| Load mismatch against | | 10:1 |
| Power supply | | AC220V±20%, 45~55Hz |
| 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 Characteristics | | |
| Operating temperature | | -40°C to 55°C |
| Humidity | | ≤95% |
| Protection class | | IP66 |



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

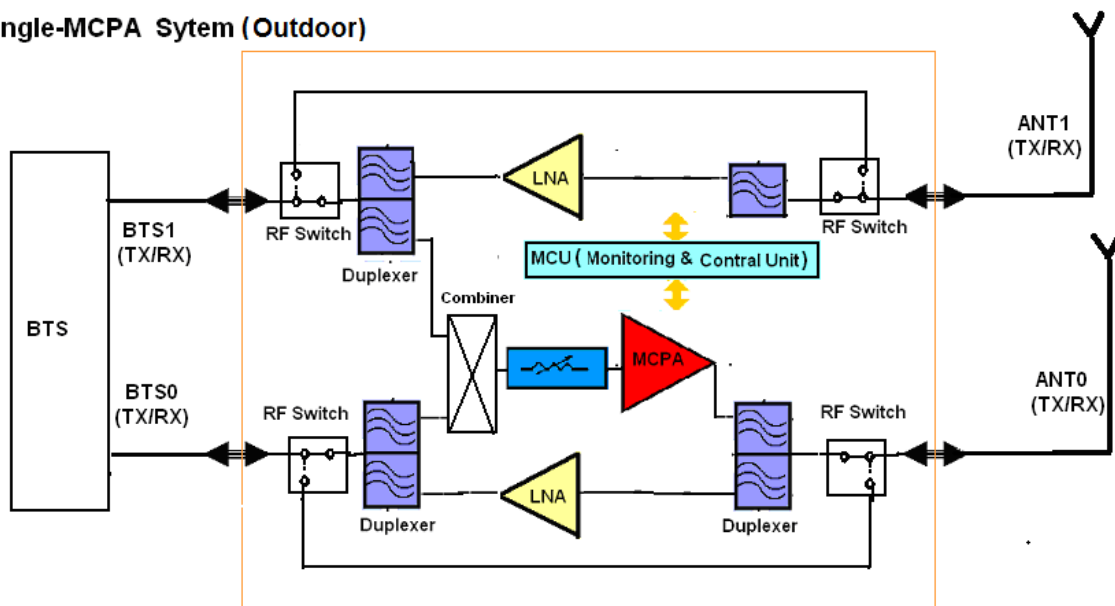
Note: All specifications subject to change without notice.

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-2100-O -50W15



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