

# PDC 1400 MHz Multi Carrier Solid State 60W Power Amplifier

Model No: MCPA-1400-60W50

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## Main Features

- **Support LTE air protocol, Fully comply with 3GPP standard**
- **Designed to meet LTE PDC 1400 MHz requirements**
- **Solid-state linearized design with 60 watts linear output power**  
(higher / Lower Power types are also available)
- **Small form factor and lightweight**
- **Suitable for single & multi FA LTE**
- **High reliability and ruggedness.**
- **Built-in Control & Monitoring Circuits**
- **Built-in Output Isolator**
- **High efficiency**
- **Adapt Doherty technology**

## Introduction

The EMTS Telecom Services PA-1400-60W50 is designed for single and multi-channel 3GPP LTE applications in the PDC 1400 MHz frequency range. Designed for single and multi-channel LTE & WCDMA applications, This amplifier utilizes linear LDMOS power devices that provide high gain, wide dynamic range, low distortions, and excellent group delay and phase linearity. Exceptional performance, long term reliability and high efficiency are achieved by employing APD (Analog Pre-distortion) technology, advanced matching networks and combining techniques (Doherty Design), EMI/RFI filters, machined housings and qualified components.



EMTS Telecom Services Ltd. offers a comprehensive portfolio of enhanced coverage solutions for the Wireless Networks, Based on advanced technologies, **EMTS's** proven, indoor and outdoor solutions solve a wide range of network issues 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

Characteristics	Rating
Operating bandwidth (MHz)	1475 1511 MHz
Power Output	48dBm (higher / Lower Power types are also available)
ALC	15dB
Gain (dB)	54±1dB @25°C
Gain Stability vs. Temperature (dB)	≤ ±1.8dB @ -25°C~+70°C(temperature)
In-band ripple	≤±0.75
ATT(dB)	≥25
IMD3	≤-55dBc
Output VSWR @ 50 ohm	≤1.25:1
Enable switch	TTL low level: open, high level: close
Supply Voltage	+28±1VDC(at 21~30VDC power amplifier without failure )
Current @ Pout =46dBm WCDMA	Working current: ≤8A (+48dBm) ; quiescent current: ≤ 3A
Operating Temperature	-25°C~+70°C
Relative Humidity	0 to 90% Non-condensing
RF Connectors Input / Output	SMA F / Type-N female
Dimensions	200*140*25mm
Adapt Doherty & APD(Analog Pre-distortion technology)	

## INTERFACE CONNECTORS

PIN	Mask	Parameter	Description	Remarks
DC Input	DC		3W3	
RF Input			SMA-KFD-5-3	
RF Output			SMA-KFD-5-3	
Control			DB-15S	
DB15-1	ATT	1dB Attenuation	Ls:0dB	5±0.5V
			Ls:-1dB	U≤0.2V
DB15-2	ATT	2dB Attenuation	Ls:0dB	5±0.5V
			Ls:-2dB	U≤0.2V
DB15-3	ATT	4dB Attenuation	Ls:0dB	5±0.5V
			Ls:-4dB	U≤0.2V
DB15-4	ATT	8dB Attenuation	Ls:0dB	5±0.5V
			Ls:-8dB	U≤0.2V
DB15-5	ATT	16dB Attenuation	Ls:0dB	5±0.5V
			Ls:-16dB	U≤0.2V
DB15-7	POB	reflected RF Power	U=4±0.1V	Pout=47dBm
			U=1.7±0.3V	Pout=32dBm
DB15-10	PO	Output RF Power	U=4±0.1V	Pout=47dBm
			U=1.7±0.3V	Pout=32dBm
DB15-11	SW	Enable switch	High Level: OFF Low Level: ON	
DB15-14	TEM	Temperature	0.01V/1 Celsius , 0.5V for 0 Celsius	
DB15-15	GND			
NC	DB6、DB8、DB9、DB12、DB13			

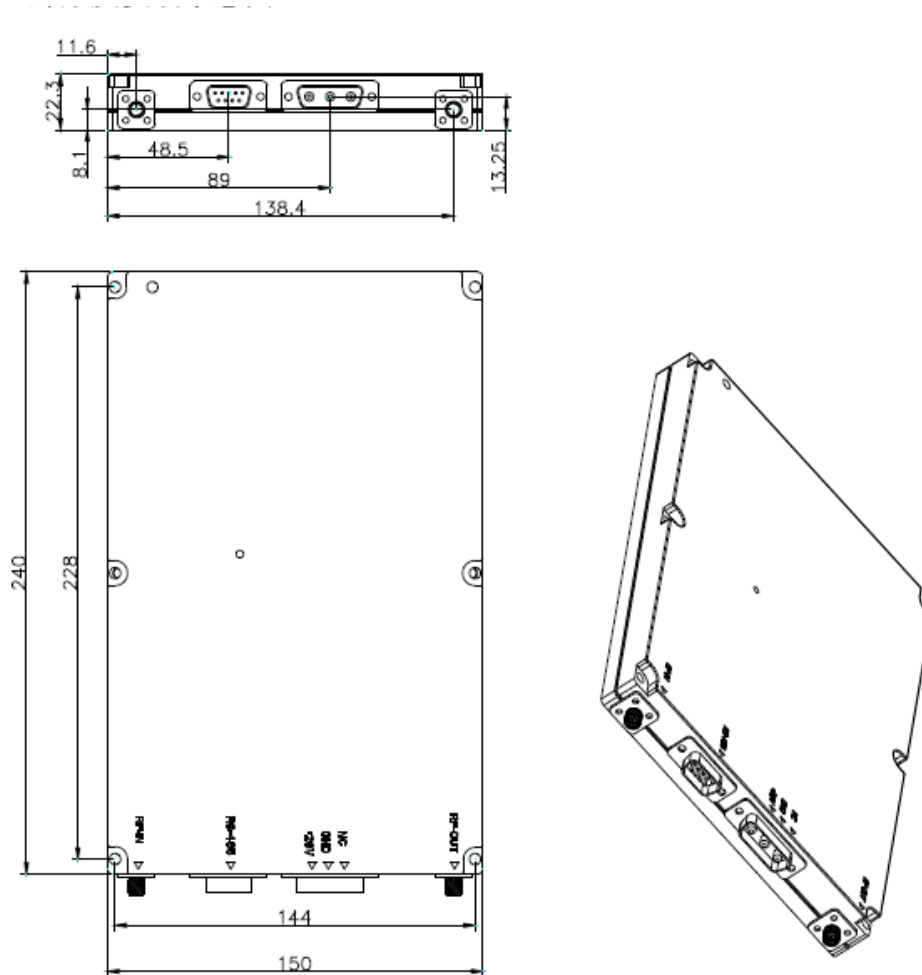
### About EMTS Telecom Services

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.

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## Outline Drawing



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TURNING TECHNOLOGY INTO SOLUTIONS

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



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