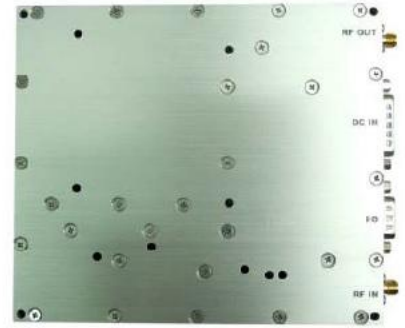


# WCDMA LTE 1900 MHz Multi Carrier Solid State 50W Power Amplifier

Model No: MCPA-1900-47W50

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## Main Features

- Support WCDMA air protocol, fully comply with 3GPP standard
- Designed to meet LTE/ HSPA / GSM / CDMA requirements
- Solid-state linearized design with 50 watts linear output power (higher / Lower Power types are also available)
- Small form factor and lightweight
- Suitable for single & multi FA WCDMA or 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-1900-47W50 is designed for single and multi-channel 3GPP WCDMA applications in the PCS 1900 MHz frequency range. Designed for single and multi-channel LTE & WCDMA applications it is also suitable for GSM. 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

ITEMS	TECHNICAL SPECIFICATION		
Frequency range	1930-1990MHz		
Output power	+47dBm (higher / Lower Power types are also available)		
Gain	50dB minimum , 54 dB typical @25 ° C		
In-band ripple	+/- 1.5 dB		
Output VSWR	≤ 1.25		
Output power detect	Detect wave level range 0.2~3.0V, accuracy: 37.5±5mV/dB, Errors≤ 1dB。 2.50V±0.1V @ Pout=+47dBm		
Backward power detect	Detect wave level range 0.2~3.0V, accuracy:37.5±5mV/dB, Error≤ 1dB。 2.45V±0.1V @ Pout=+47dBm		
Gain Adjust Range	≥0-31dB		
Gain Adjust Error	≥1dB		
IMD3	≤ -55dBc		
TEMP indicate	0~1.5V( 10mV/°C, 0.75V@25°C error≤ ±30mV)		
Enable switch	TTL low level: open, high level: close		
Working temperature	-25° C to +60 ° C		
Power voltage	+28±1VDC		
Current	Working current: ≤ 8.5A (+47dBm)		
Storage temperature	-40° C to ~+85 ° C		
MTBF	≥ 100,000h		
Size	250*240 *23.5mm		
Interface name	Signal type	Interface structure	quantity
Power	DC	J18EI2T1HN8S1HN12P	1
RF IN	RF signal	SMA-KFD-5-3 ROHS	1
RF OUT	RF signal	SMA-KFD-5-3 ROHS	1
Data control	TTL	DB-15S	1
To Monitoring function (DB15,Female) Or customized	PIN1: 1dB Attenuation, PIN2: 2dB Attenuation, PIN3:4dB Attenuation, PIN4: 8dB Attenuation, PIN5:16dB Attenuation		
	PIN7: V/L, VSWR (reflected RF Power, Max voltage,4V; 0.02V/1dBm)		
	PIN10:P/L (Output RF Power; Max voltage,4V; 0.02V/1dBm)		
	PIN11: LE :Enable, High Level: OFF; Low Level: ON		
	PIN14: T/LTemperature:0.02V/1 Celsius , 0.3V for 30 Celsius		
	PIN6, PIN8, PIN9, PIN12, PIN13 : NC		
PIN15: GND			

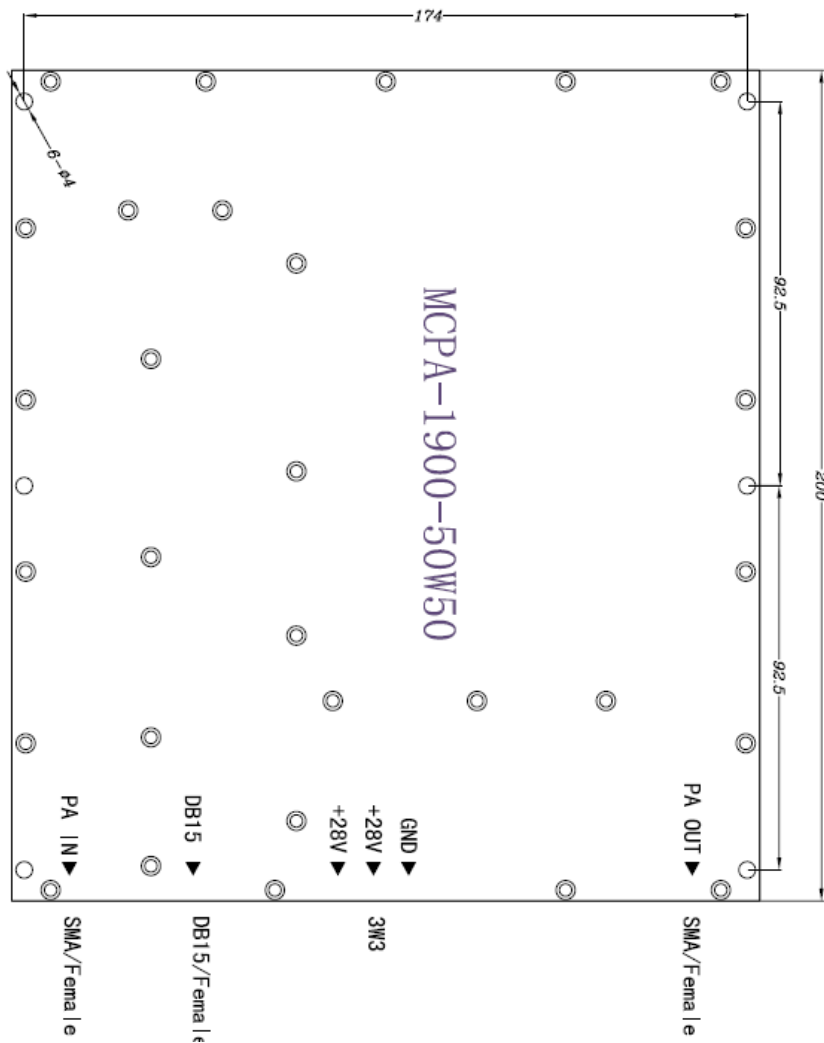
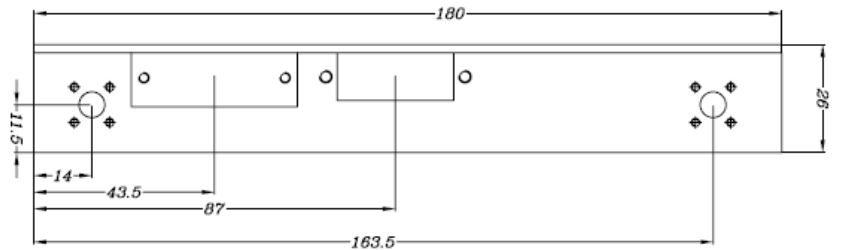
### About EMTS Telecom Services Ltd.

EMTS Telecom Services Ltd. 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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