

Synergy Telecom P Ltd.

0.4-6GHz 100W Solid State Power Amplifier

Product Description

The is a 0.4-6GHz, saturated power 50dBm high gain solid state power amplifier with state-of-art GaN design technology. It has higher saturated output power while keeping higher P_{idB} and better linearity, and can adapt to a variety of different signal modes such as continuous wave, pulse, wide instantaneous bandwidth signal high-order modulation signal and etc. It is designed for applications, such as 5G, LTE, WIFI, EMC testing and etc.

Function

- (1) Amplifying signal within 0.4-6GHz
- (2) Over-heating, over-current, over-VSWR, protection functions

Eletrical aspecification

Frequency range	0.4-6GHz		
Saturated Output Power	dBm	Typ./Min.	51/49@ Pin=0dBm
P1dB	dBm	Typ./Min.	47/44
Gain	dB	Typ./Min.	51/49@ Pin=0dBm
Gain Flatness	dB	Typ.	±2.5@ Pin=0dBm
Small Signal Gain	A	Typ.	64@ Pin=-40dBm
Small Signal Gain Flatness	:1	Typ.	±3.5@ Pin=-40dBm
Isolation@ Disable Status		Typ.	90
Input Power	dBm	Typ.	0
2nd Harmonic Suppression	dBc	Typ./Max.	-20/-15@ Pout=45dBm
3rd Harmonic Suppression	dBc	Typ./Max.	-25/-20@ Pout=45dBm
Spurious Suppression	dBc	Typ./Max.	-70/-65@ Pout=45dBm
Input VSWR	:1	Typ./Max.	1.5/2
Supply Voltage	V	Typ.	32
Power Consumption	W	Typ./Max.	550@ Pin=0dBm
Input Power	Pin≤10dBm (Input RF level without damage)		
Load VSWR	VSWR≤3:1 (The power amplifier is undamaged)		
Thermal Degradation	75℃		
RF Connector	Input: SMA [F]; Output:TYPE N [F]		
Power supply Connector	D-Sub 7W2		
Control Connector	D-Sub 7W2		
Dimension	mm	276.0x206.5x100.0 (LxWxH) (tolerance: ±0.5)	
Weight	g	Max.	6000
Finishing	Alloy iridite		
Temperature	Operating: -10℃~+55℃; Storage: -40℃ ~ +75℃		
Heat Dissipation	Unit is cooled by air-forced condition		
Waterproof Drade	IP67		
Environmental ¹	N/A		

Note: 1. Altitude, vibration and shock are designed with considerations, but without tests and experiments.

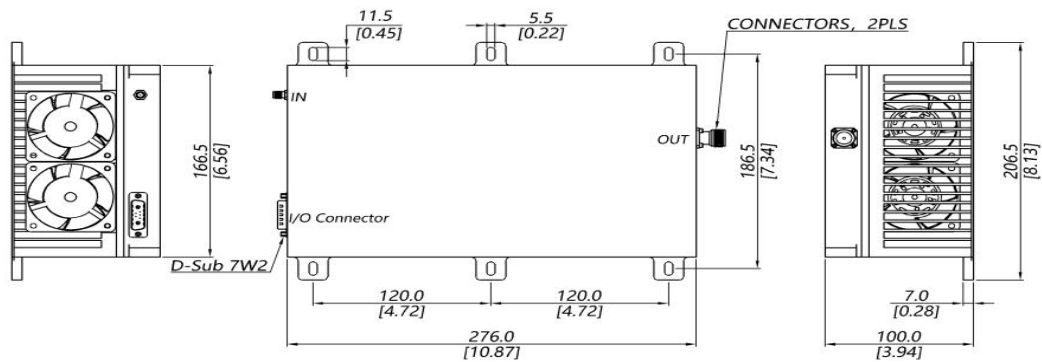
WZ-47 BUDHELLA VILLAGE ,VIKASPURI NEW DELHI-110018

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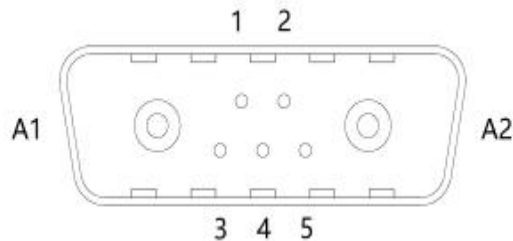
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Outline Drawing



Interface Connector Pin Out



D-Sub 7W2

A1.	GND	Ground
A2.	VDD	32 VDC
1	Current Sensor	Analog voltage relative to IDD @ 100 mV per Ampere
2	Temperature Sensor	Analog voltage relative to Module's Temperature @ 10 mV/°C
3	Enable	Amplifier Disable: TTL Logic High (3.3 V), Internally pull down
4	GND	Ground
5	N/C	No Connection

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