

SOLID STATE POWER GENERATOR

Mode: APC-2450-1500

1、 Description

APC-2450-1500 solid state generator provides max power of 1550 W with center frequency 2450MHz. It adopts LDMOS device, solid state transistor and integrated circuits and mainly complete with sine-wave generator, amplifier units, gain-adjustment unit, forward and reverse power detection circuits, various protective circuits, human-computer interaction unit, power supply and cooling system to provide perfect performance and functions including

- High stability, reliability and excellent performance
- Remote real-time monitoring system provide functions of data detection, monitoring and auto-diagnosis.
- Easily install and maintain.
- Various protection of over-current, over-temperature, short circuit, VSWR etc

2、 Technical parameters

1. Electronic parameters

- 1) Frequency: 2400~2500MHz;
- 2) Output power: $\leq 1550\text{W}$;
- 3) Output impedance : 50Ω ;
- 4) Power consumption: $\leq 4000\text{W}$;
- 5) Power stability: $\leq 1\%$;
- 6) AC input voltage: 110~240 VAC, single phase;
- 7) Output signal format: CW, pulse of option.

2. Mechanical parameters

Dimension : 645mm×440mm×285mm。

3. Other parameters

- 1) Working temperature: $-20\sim 70^{\circ}\text{C}$;
- 2) Weight: 35kg;
- 3) Interface : Microwave BJ22;
- 4) Cooling system: water cooling

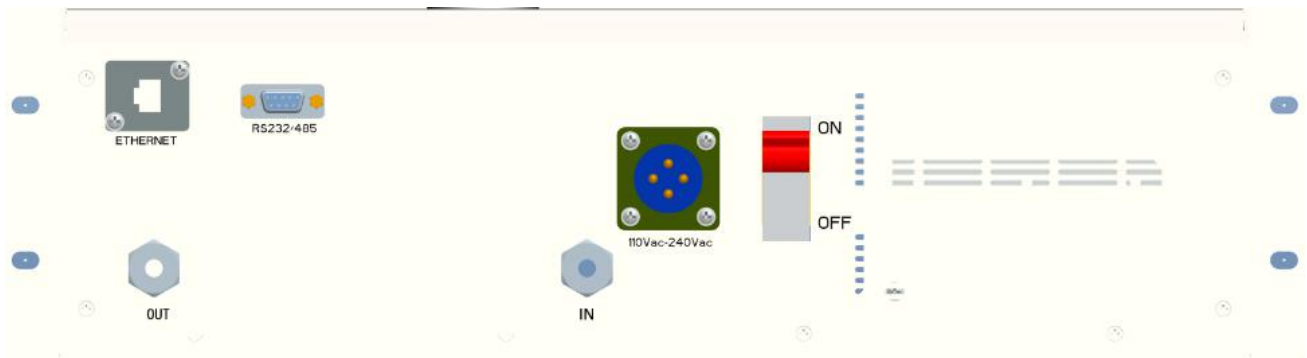
3、 Panel introduction

1. Front panel

It's LCD touch screen -7 inches

2.Rear panel

As below image2,



Page 2 Rear panel

Interface instruction :

- 1) ETHERNETi interface: Ethernet communication interface;
- 2) DB9 interface (RS232/485): RS485/RS232 communication interface, pin definition as below table 1;

Table 1 DB9 interface pin definition

Pin	Signal definition	Function	Parameter
1	A	RS485	T/R+
2	B	RS485	T/R-
3	RX	RS232 input	RS232 communication port

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4	TX	RS232 output	RS232 communication port
5	GND	GND	GND reference
6	-	-	-
7	-	-	-
8	-	-	-
9	-	-	-

3) OUT: water outlet;

4) IN: water inlet;

5) 110Vac-240Vac: power supply connector, connect to common 110V-240V AC;

6) Power switch: AC mains switch, ON is turn on power supply, OFF is turn off power supply.

3.RF interface panel

WR430 or WR340 wave guide is available, position can be changed according to user's requirements.

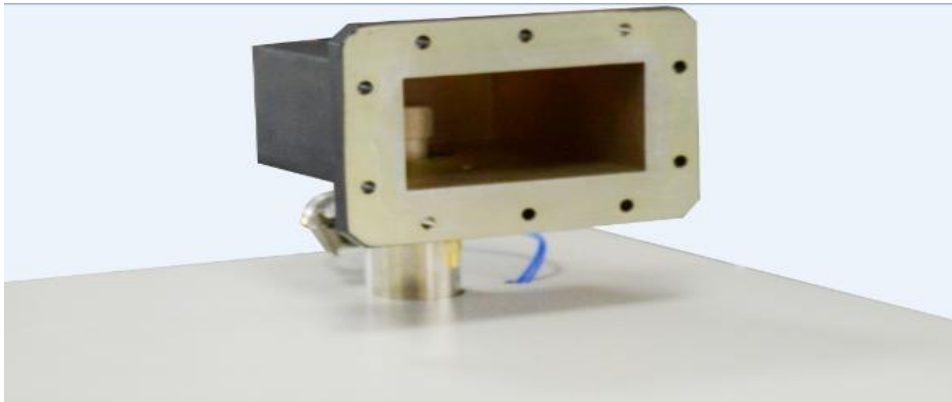


Image 3 RF output interface

4、 Function introduction

1.Control function

- Output power adjustment in 1~1550W;
- Amplifier enable control;
- CW and pulse switchover;
- Pulse duty cycle adjustment in 1%~100%;

- Pulse width adjustment in 1ms~1000ms;
- Frequency adjustment in 2440~2500MHZ;
- Timing countdown function.

2. Protection function

- Over-temperature;
 - Over-current;
 - Over-voltage;
 - Over -VSWR.
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