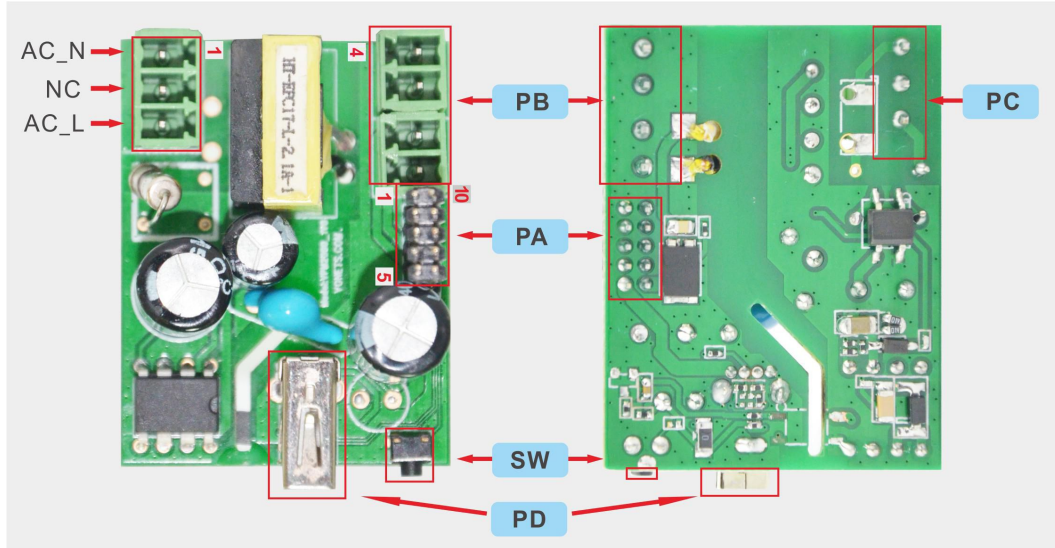


VPM2000 Power module Specification

1. Hardware Feature

1.1 Module outline:




1.2 Function feature:

- AC 110V--240V Input(**PC**);
- DC-5V/2.1A Output (**PD and PA**) ;
- Static standby power consumption is less than 1mW;
- A reset button switch (dedicated for VHA300);
- A parallel relationship between the network cable connector (dedicated for VHA300);

PB as network cable access, the corresponding pin of PA paralleled with PB, connect with VHA300 to achieve the access of the network interface of VHA300;

2. Hardware interface definition and application development comments

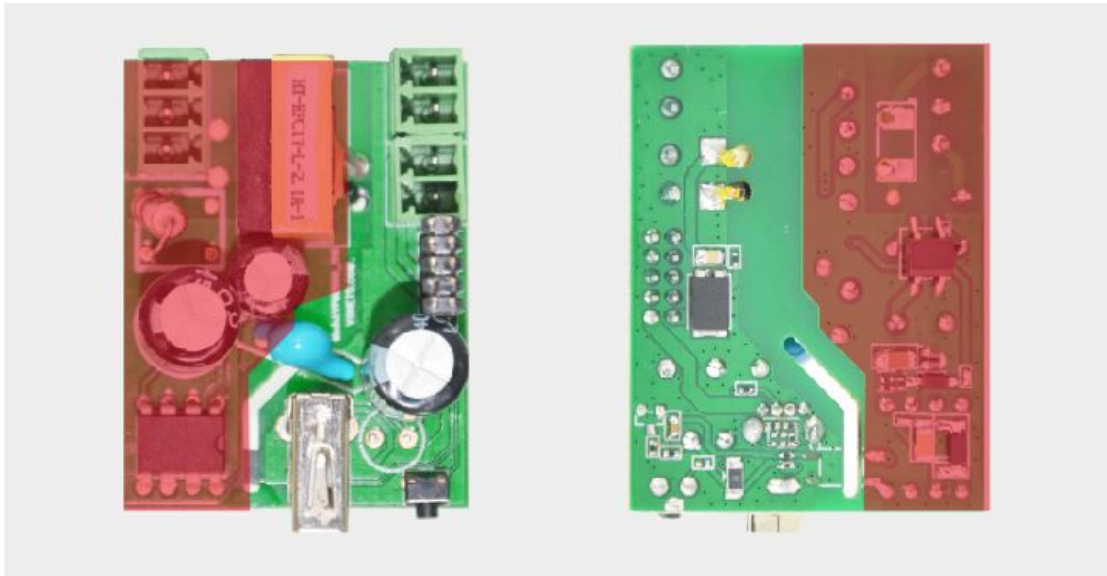
2.1 PA, PB, PC Hardware interface pin definitions, function

Pin Function	Interface pin definition			Function Description
	PA (10PIN)	PB (4PIN)	PC (3PIN)	
LAN	1:RX+ 2:RX- 3:TX+ 4:TX-	1:RX+ 2:RX- 3:TX+ 4:TX-		<p>The sub-interface LAN(PB) on module PC interface, the correspondence relationship with the standard RJ45, please see the following:</p>  <p>87654321</p> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> 1:TX+ 2:TX- 3:RX+ 6:RX- 4.5.7.8:NC </div>
VIN+	5			<ol style="list-style-type: none"> 1.The power positive and negative; 2. Input voltage:DC5V-15V 3. Input power supply: 2.5W
GND	10			The power ground of DC
USB Cable	8:USB_D- 9:USB_D+			Spare
AC Input			1:AC_N 2:NC 3:AC_L	Used for AC power input (110V-240V)
Reset (POWER ON/OFF)	6			dedicated for VHA300, used for reset or switch
NC	7			Reserved Pin, don't use

2.2 USB female function: PD provide 5V/2.1A charging output

2.3 SW reset switch function: dedicated for VHA300, used for reset or switch

3. The important attention



*** The red area is high voltage electricity, please make sure insulated, don't touch by hand to avoid accidents.**

4.Power board test

110V	Voltage test		Empty Load (V)	Light load 100MA (V)	Full load 2.1A (V)	Load VHA300 V2.0	Short circuit protection	Full load 2.1A Aging 4 hours
	Vout	TOP high-end	5.15	5.29	5.63	OK	Enable	OK
		BOTTOM Low-end	5	4.93	4.98			
		AVR Root mean square value	5.06	5.06	5.05			
	VDRAN	TOP high-end	266	304	428			
		BOTTOM Low-end	-18	-18	-12.8			
		Fs (frequency)	1.66KHZ	10.98KHZ	24.32KHZ			
VCC		10.5	15	25.1				
220V	Voltage test		Empty Load (V)	Light load 100MA (V)	Full load 2.1A (V)	Load VHA300 V2.0	Short circuit protection	Full load 2.1A Aging 4 hours
	Vout	TOP high-end	5.14	5.21	5.63	OK	Enable	OK
		BOTTOM Low-end	4.95	4.93	4.97			
		AVR Root mean square value	5.09	5.05	5.04			
	VDRAN	TOP high-end	309	309	573			
		BOTTOM Low-end	-34	-34	-30.7			
		Fs (frequency)	1.79KHZ	7.63KHZ	22.58KHZ			
VCC		10.5	15.1	25.1				