

型号/MODEL: **PD0302UC-0301**  
客户/CUSTOMER:  
日期/DATE: **2023.7.28** 版本: **A0**  
样品编号/NO: **ABPS231264**

# 承 认 书

## SPECIFICATION FOR APPROVAL

客 户:

CUSTOMER: \_\_\_\_\_

客户料号:

CUSTOMER PART NO. \_\_\_\_\_

公司料号:

COMPANY PART NO. \_\_\_\_\_

型号:

**PD0302UC- 0301**

PART NO: \_\_\_\_\_

品名:

**PD30W 美规 C口**

DESCRIPTION \_\_\_\_\_

编制日期:

**2023.7.28**

DATE \_\_\_\_\_

制造商 manufacture				请客户确认回传我司存档, 谢谢
制作 making 周宝莲	工程审核 checked 苏思友	安规审核 checked	批准 approved	

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## 1. SCOPE/ 概述

This specification applies only to PD0302UC-0301 of adapter.

本规范仅适用于 PD0302UC-0301 类型的适配器。

### 1.1 Description/描述

- SMPS Adaptor(Wall mount)/插墙式适配器     SMPS Adaptor(Desk-top)/桌面型适配器  
 Open Frame/开放式结构     USB CHARGER/USB 充电器  
 Others/其他

## 2. Input Characteristics/输入特性

### 2.1 Input Voltage & Frequency/输入电压与频率

The range of input voltage is from 90Vac to 264Vac single phase.

输入电压范围：从 90Vac 到 264Vac, 单相输入。

	Minimum/最小	Nominal/额定值	Maximum/最大
Input Voltage/输入电压	90Vac	100Vac~240Vac	264Vac
Input Frequency/输入频率	47Hz	60Hz/50Hz	63Hz

### 2.2 Input AC Current/AC 输入电流

0.8A max. @ 100-240Vac input & Full load/满载

### 2.3 Inrush Current (cold start)/浪涌电流(冷启动)

60Amax. @ 230Vac input

### 2.4 Average Efficiency/Energy Consumption 平均效率 /空载功耗-

Rated Output /额定输出	Rated load / 额定负载	The efficiency of 效率	Energy Consumption /空载功耗, 在额定输入 115/230V 时,空载功耗	备注 Remark
5V	3.0A	>81.39%	≤0.1W	
9V	3.0A	>86.62%		
12V	2.5A	>86.95%		
15V	2.0A	>86.95%		
20V	1.5A	>86.95%		

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### 3. Output Characteristics/输出特性

#### 3.1 Static Output Characteristics <Vo & R+N>/静态输出特性

Output Rate	Rated Load/额定负载		Output Range 输出电压范围	R+N 纹波与噪声	Remark 备注
	Min. Load	Max. Load			
5V	0.0A	3.0A	4.75V-5.25V	≤150mVp-p	
9V	0.0A	3.0A	8.55V-9.45V		
12V	0.0A	2.5A	11.4V-12.6V		
15V	0.0A	2.0A	14.25V-15.75V		
20V	0.0A	1.5A	19V-21V		

3.1.2 Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolysis capacitor. (test under the condition of rated input and rated output)

纹波与噪声: 量测时示波器选用 20MHz 带宽限制,输出端要并联一颗 0.1uF 的陶瓷电容和一颗 10uF 的电解电容. (在额定输入及输出的条件下检测)

#### 3.2 Line/ Load Regulation/线性/负载调整率

Output Rate	Load Condition/负载条件		Line Regulation 线性调整率	Load Regulation 负载调整率	Remark 备注
	Min. Load	Max. Load			
5V	0.0A	3.0A	± 1%	± 5%	
9V	0.0A	3.0A	± 1%	± 5%	
12V	0.0A	2.5A	± 1%	± 5%	
15V	0.0V	2.0A	± 1%	± 5%	
20V	0.0A	1.5A	± 1%	± 5%	

#### 3.3 Turn - on Delay Time/开机延迟时间

3S max. @ 100Vac to 240Vac input & Full load/满载

#### 3.4 Hold-up Time/关机维持时间

10mS min. @ Full load &115Vac/60Hz input turn off at worst case/在最差情况关机

20mS min. @ Full load &230Vac/50Hz input turn off at worst case/在最差情况关机

#### 3.5 Rise Time/上升时间

20mS max. @ Rated load/额定负载

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### 3.6 Fall Time/下降时间

20mS max. @ Full load/满载

### 3.7 Output Overshoot / Undershoot/输出过冲/欠冲

10% max. When the power on or off/当电源开/关机时

## 4. Protection Requirements/保护要求

### 4.1 Over Current Protection/过流保护

Over Current Point Limited/过流点限制:105%-200% of rated load (100-240Vac)

The output shall hiccup when the over currents applied to the output rail, and shall be self-recovery when the fault condition is removed

当过电流时,输出将进入打嗝模式,当过流情况解除后,产品将会自动恢复正常。

### 4.2 Short Circuit Protection/短路保护

When output occur short circuit,usb charger enter hiccup mode,when ocp situation solved,product will automatically recover to work .

当输出短路时,电源自动保护,进入打嗝模式,当短路情况解除后,产品将会自动恢复正常

## 5. Environment Requirements/环境要求

### 5.1 Operating Temperature and Relative Humidity/操作温/湿度要求

0°C to +25°C

10%RH to 90%RH

### 5.2 Storage Temperature and Relative Humidity/存储温/湿度要求

-20°C to +80°C

5%RH to 95%RH non-condensing @ Sea level shall be low 2,000 meter/低于 2,000 米.

### 5.3 Vibration/振动

10 to 300Hz sweep at a constant acceleration of 1.0G(Breadth: 3.5mm) for 1Hour for each of the perpendicular axes X, Y, Z

扫描频率: 10 to 300Hz, 加速度: 1.0G(位移: 3.5mm), X, Y, Z 三垂直坐标轴向各振动 1 小时

### 5.4 Drop in/跌落

Height: 1m; the product should be fell off on the hardwood with the thickness of 20mm, and the hardwood should be put on the base of the cement or on the ground without flexibility. Apply two times on all surface. Apply two times on all corner.

跌落高度:1 米, 并跌落到厚度为 20mm 的硬木上,且硬木应放在水泥基座或等同的无弹性地面上,每面各 1 次,每角各 1 次。

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## 6. Reliability Requirements/可靠性要求

### 6.1 Burn-in/煲机

The power supply shall be burn-in for 4 Hours under normal input and 80% rated load at 25°C ± 5°C。产品至少要在 25°C ± 5°C 的环境及 80% 额定负载条件下煲机 4 小时。

## 7. EMI/EMS Standards/EMI/EMS 标准

### 7.1 EMI Standards/EMI 标准

FCC Part15 Class B

### 7.2 EMS Standards/EMS 标准

7-2-1 EN 61000-4-2, electrostatic discharge(ESD) requirement/静电抗扰度要求

Discharge characteristic/静电规格	Test level/测试条件	Test criteria/测试标准
Air discharge/空气放电	+/-8KV	B
Contact discharge/接触放电	+/-4KV	B

7-2-2 EN 61000-4-3, radiated electromagnetic field susceptibility(rs)/辐射骚扰场强

Test level/测试条件	Test criteria/测试标准
3V/m (r.m.s)	A
30-1000MHz, 80%AM(1KHz) sine-wave	

7-2-3 EN 61000-4-4, electric fast transients(burst) immunity requirement/电快速瞬变脉冲群

Coupling/测试端口	Test level/测试条件	Test criteria/测试标准
AC-input/交流输入	0.5KV	A
AC-input/交流输入	1KV	B

7-2-4 EN 61000-4-5, surge capability requirement/浪涌抗扰度要求

Surge voltage/雷击电压	Test criteria/测试标准
Common mode/共模 N/A	A
Differential mode/差模 +/-1KV	

7-2-5 EN 61000-4-6, Induced radio frequency fields conducted disturbances immunity requirement/电源端子传导骚扰实验

Test level/测试条件	Test criteria/测试标准
3V	A
0.15-30 MHz, 80%AM(1KHz)	

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7-2-6 Assessment criteria /评估标准

Acceptance criteria 可接受标准	Performance 性能
A	Agreed operational behavior within the specified limits 性能不允许变化；如果性能会发生变化，则变化的范围在产品规格书规定的范围内。
B	Time limited functional diminishment or malfunction during the tests is permitted. The function is self-reactivated by the unit following completion of the tests. 设备在测试过程中,性能降低允许在产品规格书要求范围内,干扰消除后,设备能恢复正常,不允许出现复位和任何方式的人工干预。
C	Malfunction is permitted .The function can be reactivated either by reconnection to the mains or by operator intervention. 在测试过程中，设备允许出现业务中断，测试完毕后允许自行恢复或者人工干预恢复（包括硬件上干预）；测试中只允许初级防护器件损坏，并且更换损坏的初级防护器件后，设备能恢复正常

**8. Safety Standards/安规标准**

**8.1 Dielectric Strength(Hi-pot)/介电耐压强度(高压)**

Primary to Secondary: 3000Vac / 60 second

初级对次级: 3000Vac / 60 秒

**8.2 Insulation Resistance/绝缘阻抗**

50MΩ min. at primary to secondary add 500Vdc test voltage 在初级与次级间加 500Vdc 进行测试

**8.3 Regulatory Standards/安规标准**

Type/安规	Country/国家	Standard/标准	State/状况	Note/备注
ETL/FCC	USA	ETL62368	已认证	



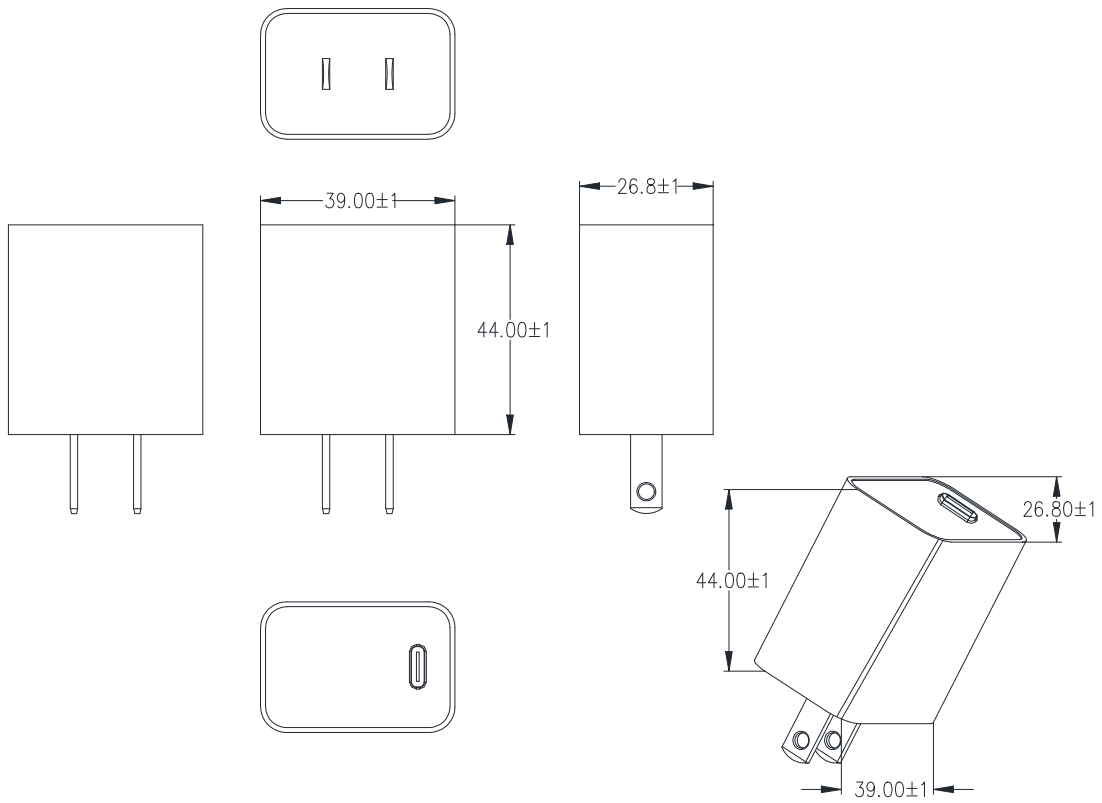
型号/MODEL: PD0302UC-0301

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## 9. Match. Outline Drawing/外观示意图



外壳材质/ shell materia: ■PC 耐温:  $120^{\circ}\text{C}$ / temperature resistance  $120^{\circ}\text{C}$

备注: PC 材质符合球压测试要求/ remark: PC texture 黑色外壳

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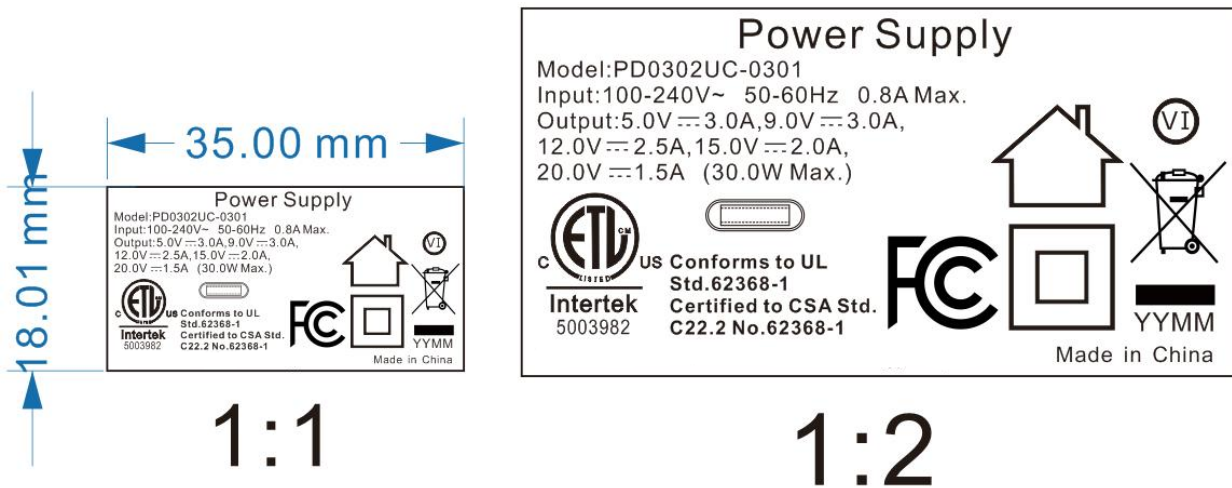
客户/CUSTOMER:

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## 10.I/O Marking Drawing/铭牌或镭雕示意图

注: 铭牌镭雕图



备注: YYMM 代表生产日期, YY 表示年, MM 表示月;

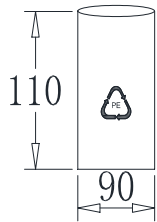
型号/MODEL: **PD0302UC-0301**

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## 11. Package Drawing/包装示意图



PE袋

料号: 35C-1100900-000

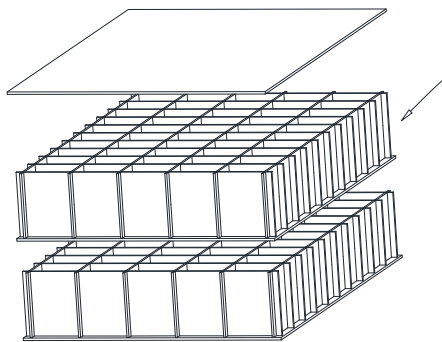
尺寸: 110\*90\*T0.03mm

平卡

料号: 36D-4913910-000

尺寸: 长490\*宽390mm, 材质: A5A

用量: 3PCS



11刀卡

料号: 36E-4810810-000

尺寸: 长486\*高80mm, 材质: A5A

用量: 6\*2=12PCS

6刀卡

料号: 36E-3810810-000

尺寸: 长386\*高80MM, 材质: A5A

用量: 6\*2=12PCS

外箱

料号: 36C-5014010-000

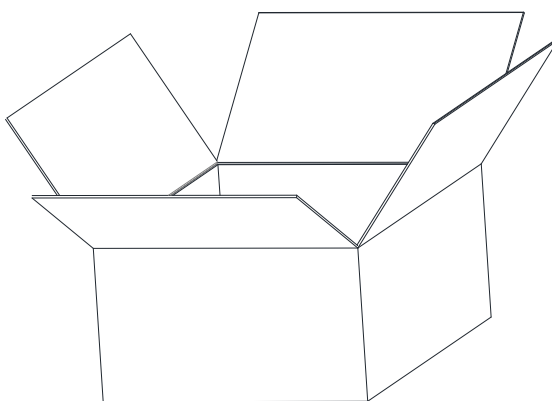
尺寸: 500\*400\*210mm

唛头: 丝印在纸箱正面和侧面中间,

印4面, 印字中性

装箱数量:

1箱装250PCS



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## 12.Sample Test Report/样品测试报告

SAMPLE ELECTRICAL TEST REPORT/样品测试报告										
Model/机型: PD30W		Customer/样品单号: ABPS23 1264			测试日期: 2023.7.28					
No 序号	Test item 测试项目	Test condition 测试条件	Standard spec 标准规格	Test data					Unit 单位	Judge 判定
				5V	9V	12V	15V	20V		
1	Output Voltage 输出电压	Vin115V AC 输入 输出空载	±5%	5.16	9.16	12.17	15.16	20.16	V	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
		Vin115V AC 输入 输出额定电流 A	±5%	5.05	9.06	12.06	15.08	20.11	V	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
2	Unload input power 空载功耗	Vin115V AC 输入 输出电流 A	≤0.1	0.06					W	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
3	OCP过流点	Vin115V AC 输入 输出额定电流	105%~200%	4.00	3.70	3.00	3.10	2.30	A	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
4	The average efficiency 平均效率	Vin115V AC 输入 输出额定电流 A	81.39 86.62 86.95 86.95	86.76	89.19	89.84	90.13	89.52	%	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
5	Ripple&Noise 纹波&杂讯	Vin115V AC 输入 输出额定电流 A	≤150	77	63	64	48	39	mV	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
6	Output Voltage 输出电压	Vin230V AC 输入 输出空载	±5%	5.18	9.17	12.17	15.16	20.16	V	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
		Vin230V AC 输入 输出额定电流 A	±5%	5.04	9.04	12.06	15.08	20.11	V	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
7	Unload input power 空载功耗	Vin230V AC 输入 输出电流 A	≤0.1	0.07					W	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
8	OCP过流点	Vin230V AC 输入 输出额定电流	105%~200%	3.70	3.90	3.00	3.10	2.30	A	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
9	The average efficiency 平均效率	Vin230V AC 输入 输出额定电流 A	81.39 86.62 86.95 86.95	84.85	88.25	89.30	89.45	89.31	%	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
10	Ripple&Noise 纹波&杂讯	Vin230V AC 输入 输出额定电流 A	≤150	77	68	61	49	45	mV	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
11	High Voltage Test高压测试	3KVAC 60S, input to output test 3KVAC/60秒输入对输出		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
12	Burn in aging 老化	Input:115VAC and 230VAC Full load 4 hrs输入115VAC和230VAC 分别满载老化4小时		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
13	Drop test 跌落测试	Hight:1m three faces(One time for each side), Conclusion: The shell does not crack, and the normal electric高1米, 3个 面, 每个面1次; 结论: 外壳不开 裂, 电性正常		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> PASS <input type="checkbox"/> NG
DRAWED/制定		CHECKED/审核		APPROVED/核准			DESIGN NO 设计编号			
吴小武							MODEL NO/型号			
							REV/版本		A0	
							DATE/日期			
							PAGE/页码		第1页共1页	