



Micro AC - DC UPS

PAU1036-120T2B300

Input : 90~300V AC/50-60Hz

DC Output : 12 VDC /3A

Charger : 14.4VDC / 1A

Capacity : 50W

Option model : 48V, 24V, 9V, 7.5V, 5V

1. Introduction:

The Micro DC UPS, PAU1036 is an AC-DC output Power Adapter build in DC battery backup function with the most advanced design of universal input, 90~300VAC, and frequency auto-detect, 50Hz – 60Hz. With the high efficiency switching type converter, the PAU1036 is able to provide stable DC 12V output at any input voltage, and when AC utility power (normal mode) is failed and transfer to backup mode (battery mode) or from backup mode to normal mode. The external Lead Acid battery designed can easily maintain battery cell by end user.

2. Main Feature :

- Desktop and light weight design.
- AC 90~300V Wide AC input range
- DC backup output design, from AC failed switch to Battery mode.
- Micro Chip designed, provide over charging, over discharging and short circuit protections.
- Backup (Red) and Charging (Flash) and Full charged (Green) LED indicators
- External replaceable battery design. User can use Lead Acid from 1.2Ah to 20Ah, depends on backup time.
- **Battery Polity reverses protection.**

3. Installation :

1. Connect the battery first.
2. Connect the Micro AC-DC UPS on wall AC outlet to recharge the battery!
Please keep this charging for 8~24 hours! Make sure the battery is fully charged.
3. Connect the DC plug with your system. Then, the Micro AC-DC UPS can apply stable DC output for your system!

4. LED Indication

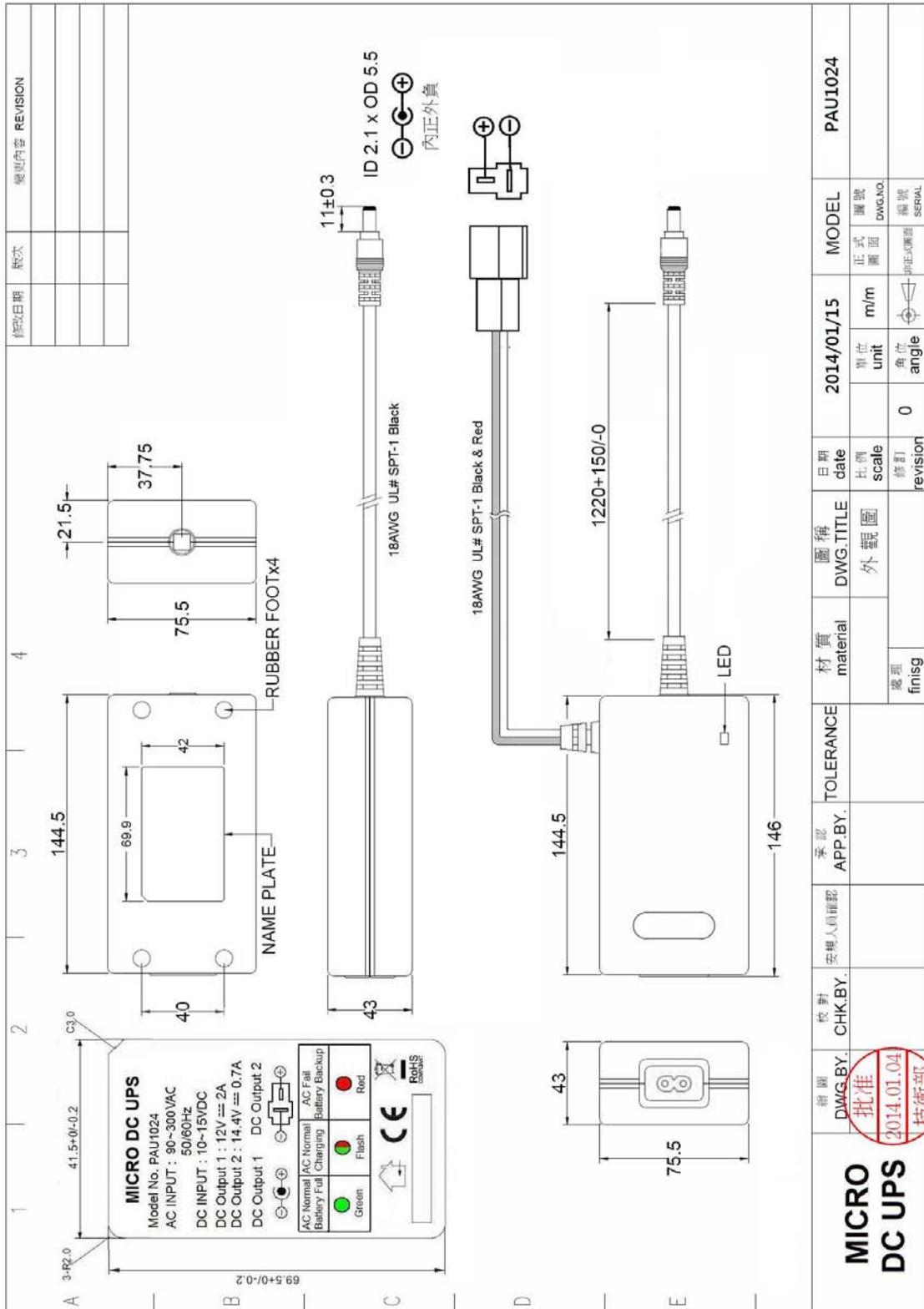
AC Normal Battery Full	AC Normal Battery Charging	AC Failed Battery backup
Green	Flash, Green and Red	Red
 Green	 Flash	 Red

5. Specification

Micro AC-DC UPS Specification		
Model	PAU1036-120T2B300	
Capacity	Watts	50W / (12VDC / 3A + 14.4VDC / 1A)
Input	Voltage	90~300VAC
	Current (MAX.)	1~0.5A depending on Input Voltage
	Frequency	50Hz - 60Hz
Output	Voltage	12V DC, +/- 5%
	Current (MAX.)	3.00A
Protection	Overload	YES, Auto Recover
	Output Short Circuit	YES, Auto Recover
	Input Short Circuit	YES, Auto Recover
Battery	Type	Lead Acid Maintenance free
	Voltage / Capacity	12V1.2Ah~20Ah X 1pcs
	Backup and recharge Time	Depends on Battery Capacity
Charger	Recharger Voltage	14.4V
	Recharger Method	Quick charging mode
	Recharger Current	700mA Typical (Max. 1A)
	Protection	Charging Voltage and over charge protected by Micro Processor.
Operation Temperature		0-40°C
Operation Humidity		20-95% Non-Condensing
Dimensions (W*H*D)		145 X 75.5 X 43 mm3
Weight (N.W. / G.W.)		700 kg
Noise		< 35 dba (At 1 Meter)
Warranty		1 Year
Safety		Meet EN60950-1
EMC		Meet EN55022

6. Mechanical Specification :

Dimension : 145 x 75.5 x 43 mm³



修改日期	版次	變更內容	REVISION

圖號	圖稱	日期	2014/01/15	MODEL	PAU1024
DWG.TITLE	外觀圖	date	m/m	正式圖面	圖號
material	材質	scale	unit	圖面	DWG.NO.
TOLERANCE	公差	revision	angle	修正圖面	圖號
APP.BY.	承認	0	0	修正圖面	SERIAL
CHK.BY.	校對				
DWG.BY.	繪圖				

MICRO DC UPS

批准
2014.01.04
技術部

A002-1B

7. Battery Specification (Reference)

PAU1036 needs to use 12V Lead Acid Battery cell and capacity is from 1.2Ah to 12Ah, depends on backup time. The below table is for your reference. Please do not use other battery pack or cell for backup.

The following vendor of Lead Acid Battery are recommend to use with PAU1036 YUASA, CSB, PILOT, BB, please visit their website to find suitable spec. and contact with your local Lead Acid Battery distributor.

Lead Acid Battery Life Cycle only has 300~400 times, and Life time is 2 to 3 years. Therefore, please replace this battery cell every 2.5 years. To make sure the backup function supported.

Appendix 1 : Lead Acid Battery cell reference table (CSB brand from 2.2Ah to 12Ah)

8. Environmental Requirements

ITEM	CONDITION	SPECIFICATION
1. Electric Fast Transients : Refer to IEC 61000-4-4	The performance is criterion A (at 1.0KV 5KHz input ac power ports)	Normal operation Shall be continued
2. Lightning Surge : Refer to IEC 61000-4-5	L – N 2KV	Normal operation Shall be continued
3. Electron Static Discharge : Refer to IEC 61000-4-2	Contact discharge performance is 4KV Air discharge performance is 8KV	Normal operation Shall be continued
4. Cooling	Natural air cooling	
5. EMI : Adapter comply with the following national standards: EMI Conducted Emission EMI Radiated Emission	120Vac / 240Vac ; Full load The adapter internal filter to meet.	FCC class B CISPR 22 Class B
6. Safety	As model label	IEC/EN60950
7. Leakage Current	.90 Vac / 50 Hz .300 Vac / 60 Hz	<0.25mA
8. Insulation Resistance	Between AC input and secondary applied 500Vdc , test time 1 sec. DC 500V , test time 1 sec .For mass production.	IEC/EN60950
9. Dielectric Strength : (Hi-Pot)	Between AC input and secondary applied AC 3KV , 5mA test time 1 sec and the Y capacitor must be remove. DC 4242V , 5mA test time 1 sec .For mass production.	Normal operation Shall be continued after test
10. Temperature	Operating Storage	0~+40°C -20~+80°C
11. Humidity	Operating Storage	10%~90% 5%~95%
12. MTBF	Following MIL-STD-217F, this test condition ambient at 25°C ,	40K hours
<p>Note : 1. Differential mode is defined as between line and neutral. 2. Common mode is defined as between phase and earth ground.</p>		