



Specification for Approval

Customer : 株式会社アコン

Part Name : **MEDICAL POWER SUPPLY**

Description : **12.0 Volts /3.0Amps**

Model No. : **ATM036T-P120(Level VI)**

Customer P / N :

Product P / N : **11502017A**

Issued Date : **12-Feb.-2026**

Version : **01**

Issued Stamp :

Customer's Approval Signature

ADAPTER TECHNOLOGY CO.,LTD.

Office (Taiwan) : 6F, No.258, Liancheng Rd., Zhonghe District, New Taipei City 235,Taiwan (R.O.C.)

TEL : +886-2-8226-2279

FAX : +886-2-8226-2238

E-mail : service@adaptech.com.tw ; service_tw@adaptech.com.tw

Factory (China) : BOAYANG ELECTRONICS CO., LTD.



36.0W
Medical Power Supply
SPECIFICATION

Model No. : **ATM036T-P120(Level VI)**

Description : **12.0Volts / 3.0Amps**

Part No. :

Version : **01**

Date : **12-Feb.-2026**

Approved	Reviewed	Checked	Prepared	Sales



1. Feature :

- ◆ **Input** : Universal 100 ~ 240 Vac / 50 ~ 60 Hz Input, without any slide switch.
- ◆ **Output** : +12.0V / 0~3.0A
- ◆ **Case Dimension** : 100 (L) * 50 (W) * 33 (H) mm
- ◆ **Efficiency** : Eff (av) \geq 87.403%
- ◆ **Safety** : I.T.E. : PSE
UL / cUL / T-mark / UKCA
ANSI/AAMI ES60601-1:2012(60601 3.1rd edition)
- ◆ **EMI** : CE / FCC (conduction & radiation Class B)
- ◆ **Protection** : OVP (Over Voltage Protection) 、 SCP (Short Circuit Protection) 、
OCP (Over Current Protection)
- ◆ Suitable for usage at I.T.E., industrial controller, medical
- ◆ Meet DoE Level VI/ CoC Tier 2 / ErP (Lot 7)

2. Input :

2.1 Voltage	Universal 100~240Vac, single phase
2.2 Frequency	50 ~ 60 Hz
2.3 Current	1A Max.
2.4 Inrush Current	70A Max. / 230Vac (Cold Start At 25 °C , Full Load) (ac source chroma 6530)
2.5 Efficiency	Eff (av) \geq 87.403% (At 115 Vac & 230 Vac) Eff \geq 78.303% @ 10% load (at 230 Vac)
2.6 Power Consumption	Pi \leq 0.1 W (At 230Vac & No Load)

$$\text{※Eff (av)} = \frac{E_1 + E_2 + E_3 + E_4}{4}$$

E1=efficiency with 25% rated load ; E2= efficiency with 50% rated load
 E3=efficiency with 75% rated load ; E4= efficiency with 100% rated load

3. Output :

3.1 DC Output	Voltage	+12.00V \pm 5%
	Current	3.0 A Max.
	Regulation	11.40Vmin. ~ 12.00Vtyp. ~ 12.60Vmax.
	Ripple & Noise	120 mVpp Max.
	Total Power	36.0W Max.

Remark : For ripple & noise measurement, use a 20MHz bandwidth frequency oscilloscope, and add a 0.1 μ F multilayer Cap. and a Low ESR Electrolytic Cap. (47 μ F) at output connector terminals. (At nominal line voltage, Full Load)



4. Protection :

4.1 Over Voltage Protection (OVP)	V out *200% MAX., latch off.
4.2 Short Circuit Protection (SCP)	Autorecovery.
4.3 Over Current Protection(OCP)	I out *200% MAX., autorecovery.

5. Safety requirement :

5.1. Dielectric strength : 10mA Max. Cut off current

(1)	Primary to Secondary	4000Vac (RMS) for 1 Minute
(2)	Primary to Frame Ground	1770Vac (RMS) for 1 Minute
※Secondary return isolated to FG		

5.2. Insulation resistance :

(1)	Primary to Secondary	10 M OHMS for 500Vdc
(2)	Primary to Frame Ground	10 M OHMS for 500Vdc
※Secondary return isolated to FG		

5.3 Leakage Current :

(1)	Earth leakage	< 5 mA for 264 Vac / 60 Hz
(2)	Touch current	< 100 uA for 264 Vac / 60 Hz

6. Operation and Environment Performance :

6.1 Temperature Range

Operating	- 20 °C ~ + 40 °C
Storage	- 20 °C ~ + 80 °C

6.2 Humidity Range(Non-condensing)

Operating	20% ~ 80% RH
Storage	10% ~ 90% RH

6.3 Cooling : By natural air.

7. M.T.B.F. : 300,000Hrs.(Calculated Hours at 25°C , By Telcordia SR-332)



8. Mechanical :

8.1 Weight : 170 g Typical

8.2 Cable Type : Black UL2468 18AWG
(Wire + Plug)

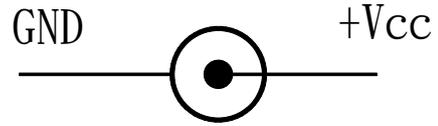
Plug : $\varnothing 5.5 * \varnothing 2.1 * 9.5 \text{mm}$
(Tuning Fork & Cannelure)

8.3 Cable Length : 1500mm

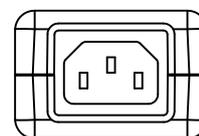
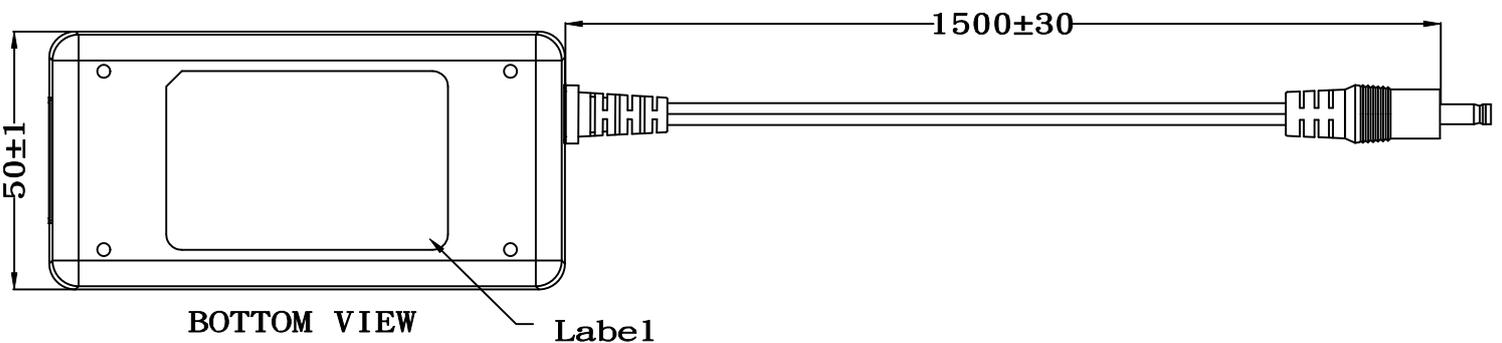
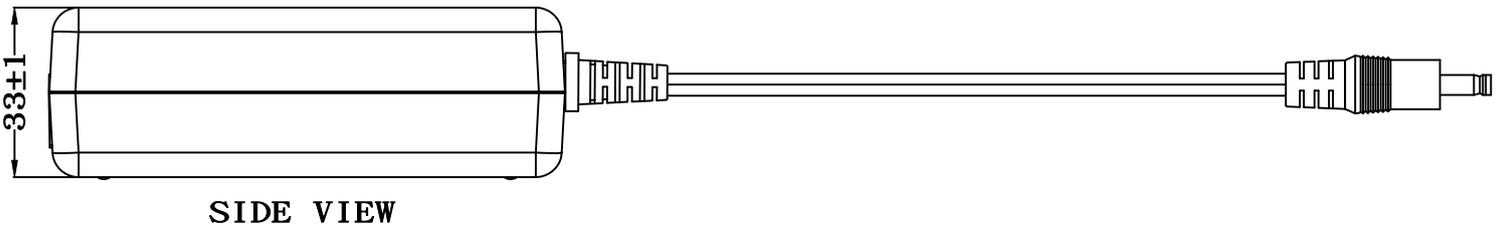
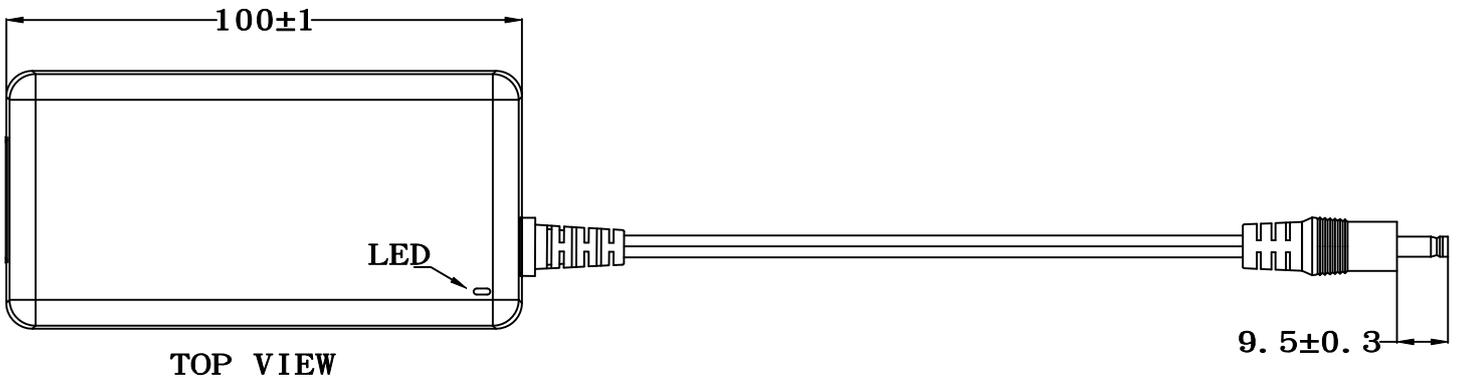
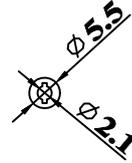
8.4 Case Dimension : 100mm(L)*50mm(W)*33mm(H)

8.5 Material Flammability : UL 94V-0

8.6 External Apperance : As drawing below (Scale \rightarrow mm)



Output Cable Plug Pin Assignment



FRONT-VIEW



Adapter Technology Co., Ltd.

8.7 Spec. Label Materials : Metalized Polyester Label (Silver Gloss)
 Color : Black Background with Silver Printing
 Manual / booklet is blue background with Silver Printing
 Label Dimension : 53.5mm(L)*34mm(W)+/-0.2mm
 Label Thickness : 75#

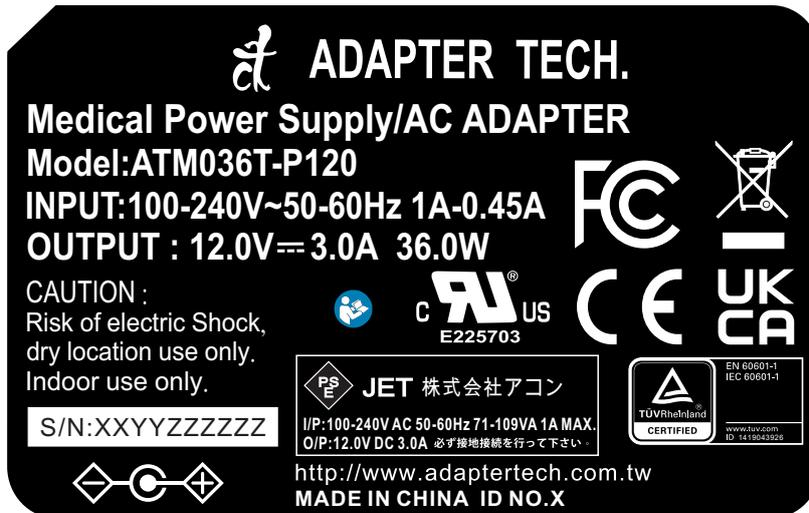
100%



ID NO."X"
 Manufacturer's code.
 It is accurate that the number
 of words depends on the real
 finished product.

XXYYZZZZZZ
 XX=YEAR 2016=16
 YY=WEEK
 ZZZZZZ=000001~999999

200%



Label Part No.:
REV:01



A. Line Regulation Test

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
90Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
115Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
132Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
180Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
230Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
264Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V

B. Efficiency Test

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
115Vac	87.403% Min.	88.13 %	88.26 %	88.14 %
230Vac	87.403% Min.	88.15 %	88.02 %	88.24 %
230Vac@10% load	78.303% Min	85.07 %	84.89 %	85.23 %

C. Load Regulation Test

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
115Vac / 0 % Load	11.40V ~ 12.60V	12.24 V	12.19 V	11.21 V
115Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
115Vac / 100 % Load	11.40V ~ 12.60V	11.90 V	11.84 V	11.87 V
230Vac / 0 % Load	11.40V ~ 12.60V	12.24 V	12.19 V	11.21 V
230Vac / 50 % Load	11.40V ~ 12.60V	12.07 V	12.02 V	12.04 V
230Vac / 100 % Load	11.40V ~ 12.60V	11.89 V	11.84 V	11.87 V



D. Ripple & Noise Test

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
115Vac / 100 % Load	120mVpp Max.	57.8 mV	61.2 mV	44.3 mV
230Vac / 100 % Load	120mVpp Max.	49.2 mV	51.2 mV	32.2 mV

E. Inrush Current

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
230Vac / 100 % Load	70A Max	62.9 A	63.5 A	62.1 A

F. Over Current Protection

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
115Vac / 100 % Load	I out *200% MAX	140 %	139 %	138 %
230Vac / 100 % Load	I out *200% MAX	146%	145 %	144 %

G. Short Circuit Protection

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
115Vac / 100 % Load	Auto Recovery	OK	OK	OK
230Vac / 100 % Load	Auto Recovery	OK	OK	OK

H. Input Power Consumption(No Load)

Test Result :

Test condition	Spec.	Reading 1	Reading 2	Reading 3
230Vac / 0 % Load	≤ 0.1 W	0.07W	0.07W	0.07W



Adapter Technology Co., Ltd.

Efficiency Test Report

- A. Model Number : ATM036T-P120(12.0V/3.0A)
- B. DC Power Cord : UL1185 , 18AWG ,1.5M
- C. Efficiency :
 LEVEL VI EFF(av) ≥ 87.403% & Eff ≥ 78.303% @10% Load
- D. NO Load Power Consumption :
 LEVEL VI 0.1W max.
- E. Testing Dequpiment :
1. AC Power Source : " Chroma 61605
2. Electronic Load : " PRODIGIT " 3311F
3. Power Meter : "YOKOGAWA " WT310
4. Digital Meter : " FLUKE " 179
- F. AC Input Voltage : 115Vac/60Hz

Reported	Load Conditions					
	100%* I ₀	75%* I ₀	50%* I ₀	25%* I ₀	10%* I ₀	0%* I ₀
Rms Output Current(mA)	3000mA	2250mA	1500mA	750mA	300mA	0mA
Rms Output Voltage(V)	11.850V	11.939V	12.027V	12.114V	12.174V	12.201V
Active Output Power(W)	35.55W	26.86W	18.04W	9.09W	3.65W	0.00W
Rms Input Voltage(V)	115V	115V	115V	115V	115V	115V
Rms Input Current(A)	0.733A	0.594A	0.456A	0.310A	0.266A	0.199A
Rms Input Power(W)	40.86W	30.55W	20.33W	10.21W	4.20W	0.050W
Total Harmonic Distortion of the input current	162.00%	177.50%	194.32%	217.72%	239.97%	154.21%
True Power Factor	0.487	0.450	0.393	0.289	0.225	0.002
Power Consumed by UUT(W)	5.31W	3.69W	2.29W	1.12W	0.55W	0.05W
Efficiency	87.01%	87.93%	88.74%	88.99%	86.96%	*
Average Efficiency	88.17%					*

- G. AC Input Voltage : 230Vac/50Hz

Reported	Load Conditions					
	100%* I ₀	75%* I ₀	50%* I ₀	25%* I ₀	10%* I ₀	0%* I ₀
Rms Output Current(mA)	3000mA	2250mA	1500mA	750mA	300mA	0mA
Rms Output Voltage(V)	11.845V	11.935V	12.023V	12.112V	12.174V	12.201V
Active Output Power(W)	35.54W	26.85W	18.03W	9.08W	3.65W	0.00W
Rms Input Voltage(V)	230V	230V	230V	230V	230V	230V
Rms Input Current(A)	0.504A	0.419A	0.328A	0.235A	0.218A	0.184A
Rms Input Power(W)	40.82W	30.49W	20.40W	10.28W	4.32W	0.064W
Total Harmonic Distortion of the input current	223.85%	239.25%	253.31%	276.62%	365.71%	456.32%
True Power Factor	0.352	0.315	0.272	0.191	0.141	0.002
Power Consumed by UUT(W)	5.29W	3.64W	2.37W	1.20W	0.67W	0.06W
Efficiency	87.11%	88.15%	88.52%	88.60%	85.07%	*
Average Efficiency	88.10%					*

Tester :Sun



INSTALLATION INSTRUCTION

ATM036T-Px (where x = 050, 075, 090, 120, 150, 180, 240) (Class I)

1. The switching power supply is intended used for medical electrical equipment.
The equipment has not been evaluated applied parts that suitable for direct patient contact! It shall be evaluated for the end system configuration.
2. Circuit diagrams, descriptions and component parts list will be made available only upon request when servicing is required. Please, contact the address below for related information.
Adapter Technology Co., Ltd.
6F-9, No.258, Liancheng Rd., Zhonghe District, New Taipei City 235, Taiwan

3. Environmental conditions:

Environmental Conditions	Operation	Temperature (°C)	0 to +40°C
		Relative Humidity (%)	20 to 80%RH
		Atmospheric Pressure (kPa)	540 to 1060hPa
	Storage/Transportation	Temperature (°C)	-20 to +80°C
		Relative Humidity (%)	10 to 90%RH

4. Input Rating: AC 100-240Vac, 50-60Hz, 1.0-0.45A

5. The output load shall not exceed the rating:

Output:

Model	O/P Voltage	O/P Current
ATM036T-P050	5V	5A
ATM036T-P075	7.5	4A
ATM036T-P090	9V	4A
ATM036T-P120	12V	3A
ATM036T-P150	15V	2.4A
ATM036T-P180	18V	2A
ATM036T-P240	24V	1.5

6. Any inspection and maintenance tasks must be carried out only by authorized by the manufacturer service personnel.

7. The classification of the equipment is:

- Class I
- The equipment has not been evaluated applied parts



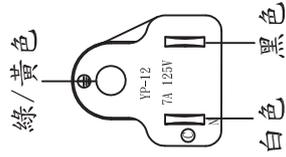
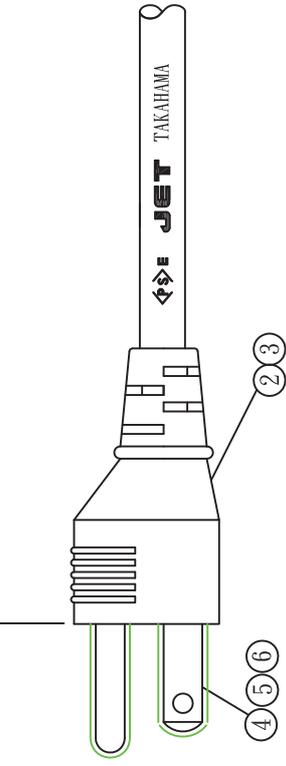
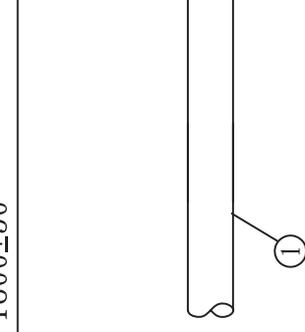
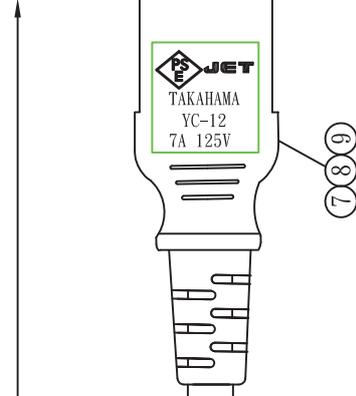
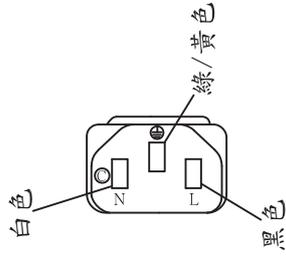
- Not AP or APG type
 - Not intended for use in the presence of flammability an aesthetic mixture with air or with oxygen or nitrous oxide
 - Intended for continuous operation
 - Protection class IPX0
8. The equipment provided with two fuses (F1, F2), fuse rated T2AL, 250Vac, size 8.35 x 4.3 x 7.7 mm.
9. Expected service life of the power supply: 100,000 hours
10. WARNING: To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth
11. WARNING: Do not modify this equipment without authorization of the manufacturer
12.  "Do not dispose this product in the household waste, please, follow the respective national law for proper disposal."
13. LED indicate: Green → Power On
14. The device is intended to be supplied by a 20A branch circuit.
15.  See Installation Instructions Manual.

ATM036T-P系列外箱印刷:

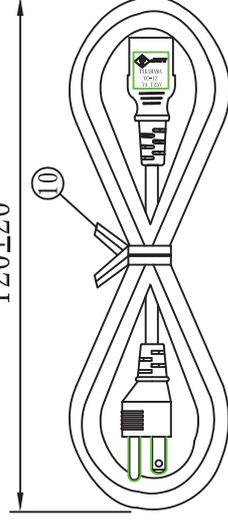
側嚙:上方印刷圖示



1800±50



120±20



序號	品名規格	用量	備注
1	線材:PSE:VCTF 0.75/3C 黑色	1PC	
2	YP-12 黑色50P膠料	19g/PC	
3	白色三插內模	1PC	
4	98675BS-1銅片	2PCS	
5	銅棒:98475	1PC	
6	三插護套 白色	1PC	
7	97740PS-0磷青銅端子	3PCS	
8	品字內模	1PC	
9	YC-12 黑色50P膠料	18g/PC	
10	迷你帶L=130mm 黑色	1PC	

線材印字:

←PSE JET TAKAHAMA VCTF 3G 0.75mm² 20XX -F-

Sample Drawing No.: SP19039-04

核准:	審核:	業務:	客戶	阿達特
一般公差: >0±0.30 >1.0±0.50 >10.0±1.0 >20.0±2.0 Angle:±1°	制圖 陳守瑞	日期 19.03.29	客戶料號 R427AE18013	
	型號 PSE(YP-12/YC-12)	版本 B	材質 P.V.C	單位 mm
	圖號	單重(g)		

東莞永力電業有限公司
YUNG LI CO.,LTD