



Shenzhen Longxc Power Supply Co.,Ltd.

(CUSTOMER) :

# SPECIFICATION

MODEL NO.: LXCP120/LXCP120(II)SERIES

DOCUMENT NO.: LXC/RD-Spec-046

CUSTOMER NO.:

DATE: 2021.02.23

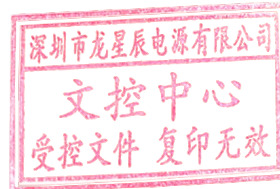
DESCRIPTION: 100-240VAC 50Hz/60Hz/12.0-48.0VDC/0-150.0W

VERSION: V03

PLEASE RETURN US COPY OF "SPECIFICATION FOR APPROVAL" WITH YOUR APPROVAL SIGNATURES.

	"√"	CUSTOMER'S SIGNATURE	NOTE
FULL APPROVED			
CONDITIONAL APPROVED			
REJECTED			

ShenZhen longxc power supply co.,ltd  
 Tel: 0755-27784192 27864721  
 Fax: 0755-29991201  
<http://www.longxc.com>



	Approved by	Checked by	Prepared by
	张永瑞 21.2.23	张金成 2021.2.23	尹文博 2021.2.23



	<b>深圳市龙星辰电源有限公司</b> <b>Shenzhen Longxc Power Supply Co., LTD</b>	Rev.	V03	Document NO.	LXC/RD-Spec-046
Specification/ <b>LXCP120/LXCP120(II) SERIES</b>		Page	3/9	Date	2021/02/23

**CONTENTS NOTE**

1	SCOPE .....	4
1.1	DECRPTION .....	4
2	MODEL NAME RULE.....	4
3	INPUT CHARACTERISTICS .....	4
3.1	INPUT VOLTAGE & FREQUENCY .....	4
3.2	INPUT CURRENT.....	4
3.3	INRUSH CURRENT .....	4
3.4	STATIC LOSS .....	4
3.5	EFFICIENCY .....	4
4	OUTPUT CHARACTERISTICS .....	5
5	ENVIRONMENTAL REQUIREMENTS .....	5
5.1	OPERATING CONDITION.....	5
5.2	STORAGE CONDITION.....	5
5.3	COOLING METHOD .....	5
5.4	ALTITUDE.....	6
6	ELECTROMAGNETIC COMPATIBILITY .....	6
7	MTBF .....	7
8	MECHANICAL .....	7
8.1	CONNECTOR TYPE.....	7
8.2	WEIGHT .....	7
9	SAFETY.....	7
9.1	SAFETY STANDARD.....	7
9.2	DIELECTRIC WITHSTAND VOLTAGE .....	7
9.3	LEAKAGE CURRENT.....	7
10	OUTLINE AND LABEL ARTWORK(UNIT: mm).....	7
11	DC PLUG FIGURE.....	8
12	NAMEPLATE .....	8
13	LNOTICE.....	9
14	PACKING REQUIREMENT (UNIT: mm).....	9

 <b>深圳市龙星辰电源有限公司</b> <b>Shenzhen Longxc Power Supply Co., LTD</b>	Rev.	V03	Document NO.	LXC/RD-Spec-046
	Specification/ LXCP120/LXCP120(II) SERIES	Page	4/9	Date

# 1 SCOPE

## 1.1 DECRPTION

This document introduces the electrical, mechanical and environmental specifications of a switching power supply.

# 2 MODEL NAME RULE

LXCP120-aaabbbb

LXCP120(II)-aaabbbb:

-LXCP= Longxc medical adapter

-120=Name of the series

-(II)= Class II equipment

- aaa="012"-“048” stands for the output condition. “012” means 12.0V, “015” means 15.0V, “018” means 18.0V, “019” means 19.0V, “024” means 24.0V, “028” means 28.0V, “036” means 36.0V,“048” means 48.0V.

- bbbb=4 digits with range of "0100"-“1000” step by 1, which stands for output current. "0100" means 1.0A, "1000" means 10.0A. Details refer to the below table:

Model number	Model number	Output current range
LXCP120-012bbbb	LXCP120(II)-012bbbb	bbbb="0100"-“1000”,1.0A-10.0 A step by 0.01A
LXCP120-015bbbb	LXCP120(II)-015bbbb	bbbb="0100"-“1000”,1.0A-10.0 A step by 0.01A
LXCP120-018bbbb	LXCP120(II)-018bbbb	bbbb="0100"-“0725”,1.0A-7.25 A step by 0.01A
LXCP120-019bbbb	LXCP120(II)-019bbbb	bbbb="0100"-“0625”,1.0A-6.75A step by 0.01A
LXCP120-024bbbb	LXCP120(II)-024bbbb	bbbb="0100"-“0625”,1.0A-6.25A step by 0.01A
LXCP120-028bbbb	LXCP120(II)-028bbbb	bbbb="0100"-“0535”,1.0A-5.35A step by 0.01A
LXCP120-036bbbb	LXCP120(II)-036bbbb	bbbb="0100"-“0415”,1.0A-4.15A step by 0.01A
LXCP120-048bbbb	LXCP120(II)-048bbbb	bbbb="0100"-“0315”,1.0A-3.15A step by 0.01A

Remark:

LXCP120-aaabbbb: For Class I Product, the Earth leakage current less than 300u A at 264Vac,60Hz.

LXCP120(II)-aaabbbb: For Class II Product , the Earth leakage current less than 100u A at 264Vac,60Hz.

# 3 INPUT CHARACTERISTICS

## 3.1 INPUT VOLTAGE & FREQUENCY

	Minimum	Nominal	Maximum
Input Voltage	90Vac	100-240Vac	264Vac
Input Frequency	47Hz	50Hz/60Hz	63Hz

## 3.2 INPUT CURRENT

The maximum input current is 2.5A at nominal AC input voltage and full load.

## 3.3 INRUSH CURRENT

The inrush current will not exceed 50A at 264Vac input for a cold start at 25°C.

## 3.4 STATIC LOSS

The static loss is less than 0.5W at normal input voltage.

## 3.5 EFFICIENCY

The efficiency shall be higher than 90% while measuring at 115VAC&230VAC input voltage, full load.

 <b>POWER<sup>®</sup> ONG.X.C</b> 深圳市龙星辰电源有限公司 Shenzhen Longxc Power Supply Co., LTD	Rev.	V03	Document NO.	LXC/RD-Spec-046
	Specification/ LXCP120/LXCP120(II) SERIES	Page	5/9	Date

#### 4 OUTPUT CHARACTERISTICS

Item	Model number		OUTPUT CHARACTERISTICS				notes
	LXCP120 series	LXCP120(II) series	Rated output voltage(V)	Output voltage range(V)	Rated output current(A)	Rated output power(W)	
Model number	LXCP120-012	LXCP120(II)-012	12.0	11.60-12.40	10.00	120	
	LXCP120-015	LXCP120(II)-015	15.0	14.60-15.40	10.00	150	
	LXCP120-018	LXCP120(II)-018	18.0	17.60-18.40	7.25	130	
	LXCP120-019	LXCP120(II)-019	19.0	18.50-19.50	6.75	130	
	LXCP120-024	LXCP120(II)-024	24.0	23.52-24.48	6.25	150	
	LXCP120-028	LXCP120(II)-028	28.0	27.44-28.56	5.35	150	
	LXCP120-036	LXCP120(II)-036	36.0	32.25-36.72	4.15	150	
	LXCP120-048	LXCP120(II)-048	48.0	47.00-49.00	3.15	152	
load regulation			±2%				
voltage			±2%				
overshoot			≤5%				ab value
Hold up time			≥10mS				@220VAC
Efficiency			≥90%				
Over current protection(A)			110-200%Iout				
Over voltage protection(V)			105-125%Vout				
Ripple and noise	≤200mV (measured by 20MHz bandwidth oscilloscope and terminated each output with a 0.1uF ceramic capacitor and a10uF aluminum electrolytic capacitor)						
Over temperature	The power supply shall go into stop mode when the IC's temperature is over its trigger point ,and when IC temperature is lower than regulation value, the power supply shall be						
Short circuit protection	The power supply shall withstand continuous current of short circuit on output no any damage. When the fault condition is removed the power supply shall be self-recovering.						

#### 5 ENVIRONMENTAL REQUIREMENTS

##### 5.1 OPERATING CONDITION

The power supply shall be compliant with each item in this specification for the following environmental conditions.

Ambient Temperature	-10℃~+40℃
Relative Humidity	20%~90%

##### 5.2 STORAGE CONDITION

Ambient Temperature	-20℃~+80℃
Relative Humidity	10%~90%

##### 5.3 COOLING METHOD

Free air convection

 <b>POWER<sup>®</sup> ONG.X.C</b> 深圳市龙星辰电源有限公司 Shenzhen Longxc Power Supply Co., LTD	Rev.	V03	Document NO.	LXC/RD-Spec-046
Specification/ LXCP120/LXCP120(II) SERIES	Page	6/9	Date	2021/02/23

#### 5.4 ALTITUDE

Less than or equal to 5000m

### 6 ELECTROMAGNETIC COMPATIBILITY

Number	Item	Specifications	class	standards
1	CE	CLASS B	/	IEC/EN60601-1-2; YY0505 GB4824; EN55011; FCC Part 18
2	RE	CLASS B	/	IEC/EN60601-1-2; YY0505 GB4824; EN55011; FCC Part 18
3	SURGE	Line to line $\pm$ 1KV	A	IEC/EN60601-1-2; YY0505
		Line to GND $\pm$ 2KV	A	IEC/EN61000-4-5; GB17626.5
4	ESD	air discharge $\pm$ 15KV	A	IEC/EN60601-1-2; YY0505
		Contact discharge $\pm$ 8KV	A	IEC/EN61000-4-2; GB17626.2
5	EFT/B	$\pm$ 2KV (BURST FREQUENCY=100KHZ)	A	IEC/EN60601-1-2; YY0505 IEC/EN61000-4-4; GB17626.4
6	DIP	Dropped to 0%Ut, last 5000ms(250cycle)	B	IEC/EN60601-1-2; YY0505 IEC/EN61000-4-11; GB17626.11
		Dropped to 30%Ut, last 500ms(25 cycle)	B	
		Dropped to 0%Ut, last 20ms(1 cycle)	B	
		Dropped to 0%Ut, last 10ms(0.5 cycle)	A	
7	RS	Test frequency: 80MHz~2700MHz; magnetic field intensity: 10V/m; Amplitude modulation: 80%AM(1KHz)	A	IEC/EN60601-1-2; YY0505 IEC/EN61000-4-3; GB17626.3
8	CS	Test frequency: 0.15MHz~80MHz; electric field intensity: 6Vrms; Amplitude modulation: 80%AM(1KHz)	A	IEC/EN60601-1-2; YY0505 IEC/EN61000-4-6; GB17626.6
9	THD	CLASSA(in system)	/	IEC/EN60601-1-2; YY0505 IEC/EN61000-3-2; GB17625.1
10	Voltage Fluctuation and Flicker	Pst $\leq$ 1.0;Plt $\leq$ 0.65;Relative steady-state voltage variation dc under3.3%;Maximum relative voltage variation (dmax) under4%	/	IEC/EN60601-1-2; YY0505 IEC/EN61000-3-3; GB17625.2
11	Power Frequency Magnetic Field	30A/m	A	IEC/EN60601-1-2; YY0505 IEC/EN61000-4-8; GB17626.8

Note:

Performance criterion A: Normal performance within limits specified by the manufacturer, requestor or purchaser

Performance criterion B: Temporary loss of function or degradation of performance which ceases after the disturbance ceases, and from which the equipment under test recovers its normal performance, without operator intervention

Performance criterion C: Temporary loss of function or degradation of performance, the correction of which requires operator intervention

Performance criterion D: loss of function or degradation of performance which is not recoverable, owing to damage to hardware or software, or loss of data


 <b>深圳市龙星辰电源有限公司</b> <b>Shenzhen Longxc Power Supply Co., LTD</b>	Rev.	V03	Document NO.	LXC/RD-Spec-046
	Specification/ LXCP120/LXCP120(II) SERIES	Page	7/9	Date

## 7 MTBF

The power supply shall have a minimum predicted MTBF(MIL-STD-217F) of 100000 hours at normal operation condition and normal use.

## 8 MECHANICAL

### 8.1 CONNECTOR TYPE

AC INPUT	CE PLUG
DC OUTPUT	DC Cable 

### 8.2 WEIGHT

The weight of the power supply shall be about 650g.

## 9 SAFETY

### 9.1 SAFETY STANDARD

The power supply is designed for indoor use to meet IEC 60601-1 and EN 60601-1 standards and for the following safety regulations.

	ITEM	COUNTRY	STANDARD
<input type="checkbox"/>	UL	USA	UL60950-1/UL60601-1
<input checked="" type="checkbox"/>	CE	EUROPE	EN60950-1/EN60601-1
<input checked="" type="checkbox"/>	CB	WORLDWIDE	IEC 60601-1
<input checked="" type="checkbox"/>	TUV	GERMANY	IEC60601-1
<input type="checkbox"/>	NRTL	CUSA	IEC60601-1/UL60601-1
<input type="checkbox"/>	GS	GERMANY	EN60601-1
<input type="checkbox"/>	BS	ENGLAND	EN60601-1
<input type="checkbox"/>	SAA	AUSTRALIA	AS/NZS6-1
<input type="checkbox"/>	CCC	CHINA	GB4943/GB9706

### 9.2 DIELECTRIC WITHSTAND VOLTAGE

Primary to Secondary: 4KVac for 60 seconds, 5mA(max)

### 9.3 LEAKAGE CURRENT

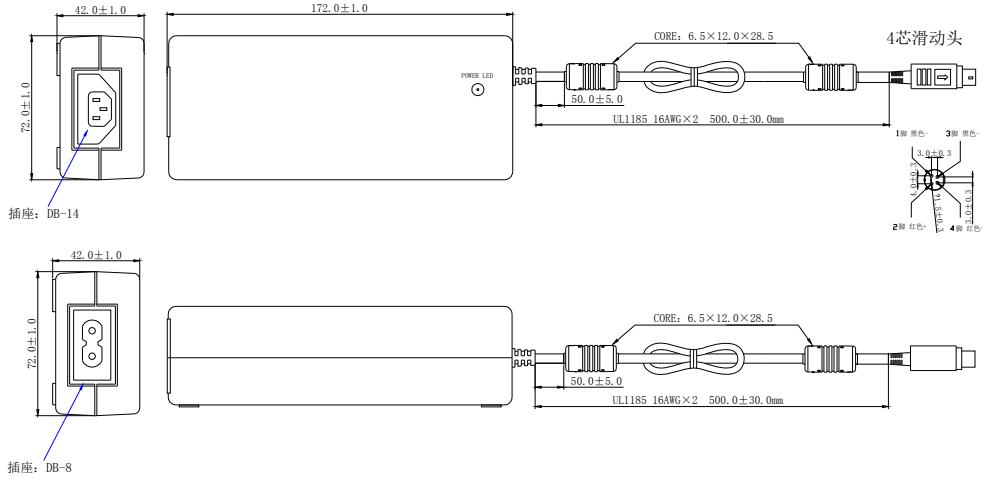
According to the class II with Leakage current less than 0.1mA.

## 10 OUTLINE AND LABEL ARTWORK(UNIT: mm)



 <b>深圳市龙星辰电源有限公司</b> <b>Shenzhen Longxc Power Supply Co., LTD</b>	Rev.	V03	Document NO.	LXC/RD-Spec-046
	Specification/ LXCP120/LXCP120(II) SERIES	Page	8/9	Date

L\*W\*H 172.0\*72.0\*42.0



## 11 DC PLUG FIGURE(Detail information selection from file of LXC\_Dcline\_Library.xls)

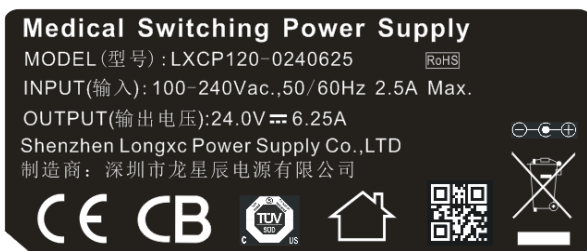


### Optional input plug:

The AC input line shall be required for VDE or UL certification.

## 12 NAMEPLATE


The label of the power supply, please see below



### Symbol explanation on nameplate:


: Direct current

: DC Cable

: Class II equipment, earth-free

: CE mark

: RoHS mark

: In-door use only

: CB mark



 <b>深圳市龙星辰电源有限公司</b> <b>Shenzhen Longxc Power Supply Co., LTD</b>	Rev.	V03	Document NO.	LXC/RD-Spec-046
	Specification/ LXCP120/LXCP120(II) SERIES	Page	9/9	Date



: NRTL mark



: Two-dimensional code



: Environment protection- waste electrical products should not be disposed of with household waste.

Please follow the local government guidelines

### 13 LNOTICE

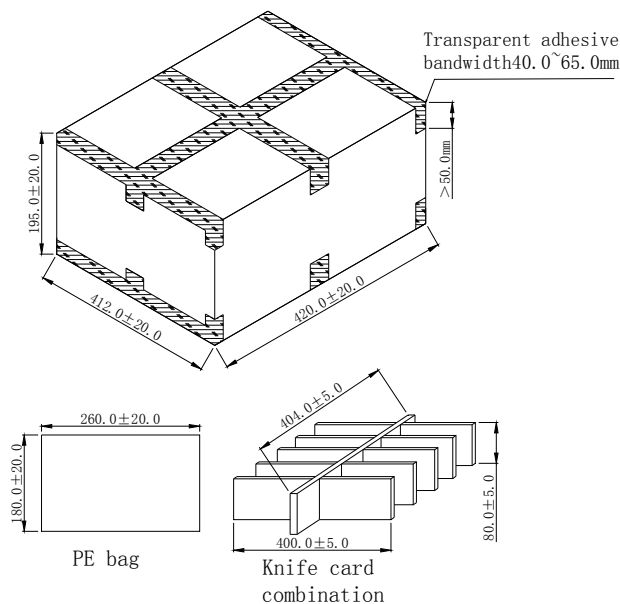
- The power supply shall be transported by cars, boats and aircraft, and it should be pay attention to sun, moisture and handing in transit.
- At the termination of the products use the products need to be reasonable processed according to the requirements of the local government.

### 14 PACKING REQUIREMENT (UNIT: mm)

- Each power adapter is packed in a PE bag
- Packing Q'ty 20pcs/CTN (Size: 420.0\*412.0\*195.0mm)
- weigh about 16Kg
- Outline just for reference

The cartons: 420.0×412.0×195.0mm  
 10sets/floor×2=20sets/box  
 Weight: about16kg/box

Box screen printing:



深圳市龙星辰电源有限公司

Shenzhen LongXC Power Supply Co., LTD.  
 Add: 深圳市宝安区石岩街道应人石文韬科技园B栋4-5层  
 4-5/F, B Building, Yingrenshi Community, Wentao Science Park,  
 Shiyao Town, Bao'an, Shenzhen, China  
 Tel: 0755-27784192 27864721  
 Fax: 0755-29991201  
 Web: <http://www.longxc.com>

