



产品规格书

SPECIFICATION FOR APPROVAL

Medical Switching Power Supply / 医疗开关电源

客户:

CUSTOMER NO: _____

产品描述:

DESCRIPTION: Input:100~240VAC 50/60Hz Output:12.0-48.0VDC 100W

机种型号:

OUR MODEL NO: ACMS100 系列

文件编号:

日期:

DOCUMENT NO: LXC/RD-Spec-233

DATE: 2021-09-22

客户编号

版本:

CUSTOMER NO: _____

VERSION: V00

产品颜色:

SAMPLE COLOR: Black White

深圳市龙星辰电源有限公司

ShenZhen Longxc Power Supply Co., Ltd.

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核准/APPROVED BY	审核/CHECKED BY	编制/PREPARED BY



深圳市龙星辰电源有限公司
Shenzhen Longxc Power Supply Co.,LTD

型号/Our model: ACMS100 系列
客户/ Customer:
日期/Date: 2021.09.22
文件编号/ Document No: LXC/RD-Spec-233

版本目录/Rev. List			
版 /Rev.	日期/Date	描述/ Description	制订/Design
A0	2021-09-22	新版本/New Rev.	尹辉

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1. 产品图片/PRODUT PICTURE



2. 描述/ DESCRIPTION:

本规格书适应于 ACMS 100系列型号的开关电源.

The purpose of the document is to specify the functional requirements of a 100 W switching power supply.

3. 型号命名规则/ MODEL NAME RULE

ACMS100-aaa

-ACMS=单路医疗开关电源

-100=系列名称/-100=Name of the series

-aaa= “120” - “480” 为输出条件。“120” 是 12.0V, “135” 是 13.5V, “150” 是 15.0V, “168” 是 16.8V, “180” 是 18.0V, “190” 是 19.0V, “200” 是 20.0V, “240” 是 24.0V, “260” 是 26.0V, “280” 是 28.0V, “300” 是 30.0V, “320” 是 32.0V, “360” 是 36.0V, “380” 是 38.0V, “400” 是 40.0V, “420” 是 42.0V, “460” 是 46.0V, “480” 是 48.0V 是。

- aaa= “120” - “480” stands for the output condition. “120” means 12.0V, “135” means 13.5V, “150” means 15.0V, “168” means 16.8V, “180” means 18.0V, “190” means 19.0V, “200” means 20.0V, “240” means 24.0V, “260” means 26.0V, “280” means 28.0V, “300” means 30.0V, “300” means 30.0V, “320” means 32.0V, “360” means 36.0V, “380” means 38.0V, “400” means 40.0V, “420” means 42.0V, “460” means 46.0V, “480” means 48.0V.

型号/Model number	输出电压/ Output Voltage (Vdc)	自然冷却 Natural Cooling		10CFM 风冷 Fan Cooling	
		输出电流/ Output current (A)	输出功率/Output Power (W)	输出电流/ Output current (A)	输出功率/Output Power (W)
ACMS100-120	12.0	0-8.5	102.0	0-12.0	144.0
ACMS100-135	13.5	0-7.4	100.0	0-10.4	140.0
ACMS100-150	15.0	0-6.7	100.5	0-9.4	140.0
ACMS100-168	16.8	0-6.0	100.8	0-8.4	140.0
ACMS100-180	18.0	0-5.6	100.8	0-7.8	140.0



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ACMS100-190	19.0	0-5.3	100.7	0-7.4	140.6
ACMS100-200	20.0	0-5.0	100.0	0-7.0	140.0
ACMS100-240	24.0	0-4.2	100.8	0-5.9	141.6
ACMS100-260	26.0	0-3.9	101.4	0-5.4	140.0
ACMS100-280	28.0	0-3.6	100.8	0-5.0	140.0
ACMS100-300	30.0	0-3.3	100.0	0-4.7	141.0
ACMS100-320	32.0	0-3.1	100.0	0-4.4	140.8
ACMS100-360	36.0	0-2.8	100.8	0-3.9	140.0
ACMS100-380	38.0	0-2.6	100.0	0-3.7	140.6
ACMS100-400	40.0	0-2.5	100.0	0-3.5	140.0
ACMS100-420	42.0	0-2.4	100.8	0-3.3	142.8
ACMS100-460	46.0	0-2.2	101.2	0-3.1	142.6
ACMS100-480	48.0	0-2.1	105.6	0-3.0	144.0

4. 输入特性/INPUT CHARACTERISTICS:

4.1 输入电压/Input Voltage:

额定电压/Nominal Voltage:100~240Vac

调整范围/Variation Range:90~264Vac

4.2 输入频率/Input Frequency:

额定频率/ Nominal Frequency: 50/60Hz

调整频率/Variation Frequency:47~63Hz

4.3 输入电流/Input Current:

当输入交流电压为额定值的下限电压负载满载时,最大输入交流电流 2.0A.

2.0Amps max at any input voltage and rated DC output and rated load.

4.4 浪涌电流/Inrush Current:

当输出为额定负载,环境温度为 25℃,输入 220Vac 冷态起机时的最大浪涌电流小于 120A.

120Amps Max. Cold start at 220Vac input, with rated load and 25℃ ambient.

4.5 泄漏电流/ Leakage Current:

当输入电压 264Vac 时,正常状态最大漏电流为 0.5mA.

Normal 0.5mA Max.at 264Vac input.

当输入电压 264Vac 时,单一故障状态最大漏电流为 1.0mA.

Single fault 1.0mA Max.at 264Vac input.



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5. 输出特性/OUTPUT CHARACTERISTICS:

5.1 输出功率/Power output

型号/Model name	输出电压/ Output Voltage (V)	输出范围 /Output Range (V)	自然冷却 Natural Cooling		10CFM 风冷 Fan Cooling	
			输出电流/ Output current (A)	输出功率 /Output Power (W)	输出电流/ Output current (A)	输出功率 /Output Power (W)
ACMS100-120	12.0	11.76-12.24	0-8.5	102.0	0-12.0	144.0
ACMS100-135	13.5	13.23-13.77	0-7.4	100.0	0-10.4	140.0
ACMS100-150	15.0	14.70-15.30	0-6.7	100.5	0-9.4	140.0
ACMS100-168	16.8	16.46-17.13	0-6.0	100.8	0-8.4	140.0
ACMS100-180	18.0	17.64-18.36	0-5.6	100.8	0-7.8	140.0
ACMS100-190	19.0	18.62-19.38	0-5.3	100.7	0-7.4	140.6
ACMS100-200	20.0	19.60-20.40	0-5.0	100.0	0-7.0	140.0
ACMS100-240	24.0	23.52-24.48	0-4.2	100.8	0-5.9	141.6
ACMS100-260	26.0	25.48-26.52	0-3.9	101.4	0-5.4	140.0
ACMS100-280	28.0	27.44-28.56	0-3.6	100.8	0-5.0	140.0
ACMS100-300	30.0	29.40-30.60	0-3.3	100.0	0-4.7	141.0
ACMS100-320	32.0	31.36-32.64	0-3.1	100.0	0-4.4	140.8
ACMS100-360	36.0	35.28-36.72	0-2.8	100.8	0-3.9	140.0
ACMS100-380	38.0	37.24-38.76	0-2.6	100.0	0-3.7	140.6
ACMS100-400	40.0	39.20-40.80	0-2.5	100.0	0-3.5	140.0
ACMS100-420	42.0	41.16-42.84	0-2.4	100.8	0-3.3	142.8
ACMS100-460	46.0	45.08-46.92	0-2.2	101.2	0-3.1	142.6
ACMS100-480	48.0	47.04-48.96	0-2.1	105.6	0-3.0	144.0
线性调整率/Line Regulation			±2%			
负载调整/Load Regulation			±2%			

5.2 纹波和噪音 Ripple and Noise:

测试条件:在额定电压及额定负载条件下,使用示波器带宽为 20MHz 连接到充电器的输出端,同时输出端并联一个 10uF 的电解电容和一个 0.1uF 的瓷片电容,最大纹波/最大噪音小于等于 1%(Vout mVp-p)。

Under nominal voltage and rated load, the ripple and noise are as follows when measure with Max. Bandwidth of 20MHz and Parallel 10uF/0.1uF, crossed connected at testing point. Ripple and Noise(Max.) less than $\leq 1\%(V_{out} \text{ mVp-p})$ 。

5.3 启动延迟时间/Turn on delay time:

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当输入 220Vac 和输出额定负载时, 最大启动时间为 3S.

3 Second Max.at 220Vac input and output rated load.

5.4 上升时间/Rise time:

当输入 115Vac 和输出额定负载时最大时间为 40mS.

40mS Max.at 115Vac input and output rated load.

5.5 保持时间/Hold up time:

当输入 115Vac 和输出额定负载时, 最小保持时间为 5mS.

5 mS Min.at 115Vac input and output rated Load.

5.6 效率/Efficiency:

当 115/230Vac 输入电压时, 1/4, 1/2, 3/4 和额定计算平均效率, 最小 90%.

90% Min, at 115/230Vac input voltage, 1/4, 1/2, 3/4 and rated load calculation average efficiency.

6. 保护功能/PROTECTION FUNCTION:

6.1 短路测试/Short circuit test:

该电源供给器在短路解除时能恢复正常工作.

The power supply will be auto recovered when short circuit faults remove.

6.2 过流保护/Over current Protection:

当输出电流达到额定电流的 110%~200%时, 电源将保护, 过流故障排除后, 电源将自动恢复正常工作.

When the output current reaches 110%~200% of the rated current, the power supply will be protected. After the overcurrent fault is removed, the power supply will be automatically recovery.

6.3 过压保护/Over Voltage Protection:

当输出电压达到额定电压的 110%~140%时, 电源将保护, 故障排除后能恢复正常工作.

When the output voltage reaches 110%~140% of the rated voltage, the power supply will be protected and can resume normal work after trouble removed.

7. 环境要求/ENVIRONMENTAL REQUIREMET:

7.1 工作温度/Operating Temperature:

0°C~40°C, 满载, 正常工作.

0°C to 40°C, Rated load, Normal operation.

7.2 储藏温度/Storage Temperature:-20°C to 80°C

电源不工作/ No work

7.3 储藏湿度/ Storage Humidity: 10%~90%

无冷凝/No condensation

7.4 工作湿度/Relative Humidity:

5%(0°C)~90%(40°C), 72 小时, 满载, 正常工作.

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5% (0°C) ~ 90% (40°C) RH, 72Hrs, Rated load, Normal operating.

7.5 大气压力/ Atmospheric pressure:

70-106KPa, 正常工作.
70-106KPa, Normal.

7.6 海拔高度/ Altitude:

5000 米, 超过 5000 米以上, 海拔高度每升高 300 米工作温度降低 1°C.
5000m, Work temp descend 1°C every 300m over 5000m.

7.7 振动/Vibration:

1. 测试标准: 国际电工电子委员会

Operating: IEC 721-3-3 3M3
5~9Hz, A=1.5mm
加速度 (9~200Hz, Acceleration 5m/S²)

2. 运输/Transportation:

IEC 721-3-2 2M2
5-9Hz, A=3.5mm
9~200Hz, 加速度 Acceleration=5m/S²
200~500Hz, 加速度 Acceleration=15m/S²

3. 轴向振动/Axes, 10 cycles per axis.

在测试过程中不能出现永久性的损坏.
No permanent damage may occur during testing.
在电源开启和关闭后, 电源能够恢复到最初条件.
The Power supply can be Restore to normal after power off/on.

8. MTBF

≥100,000 hours 25°C, 满载, 220Vac

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

9. EMC 特性/ELECTROMAGNETIC COMPATIBILITY:

Number / 序号	Item/项目	Specifications/标准 (或测试条件)	Class/判断标准	Standards/备注
1	传导干扰 (CE)	CLASS B	/	IEC/EN60601-1-2; YY0505 GB4824; EN55011; FCC Part 18; GB4824
2	辐射干扰 (RE)	CLASS B	/	IEC/EN60601-1-2; YY0505 GB4824; EN55011; FCC Part 18



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3	浪涌 (SURGE)	线线±1KV /Line to line±1KV	A	IEC/EN60601-1-2; YY0505 IEC/EN61000-4-5; GB17626.5
		线地±2KV /Line to GND±2KV	A	
4	静电抗扰 (ESD)	空气放电±15KV Air discharge±15KV	A	IEC/EN60601-1-2; YY0505 IEC/EN61000-4-2; GB17626.2
		接触放电±8KV /Contact discharge±8KV	A	
5	快速瞬变脉冲群 (EFT/B)	±2KV (BURST FREQUENCY=100KHZ)	A	IEC/EN60601-1-2; YY0505 IEC/EN61000-4-4; GB17626.4
6	电压跌落和短时间中断 (DIP)	跌落到 0%Ut, 持续时间 5000ms (250 个周期) / Dropped to 0%Ut, last 5000ms (250 cycle)	B	IEC/EN60601-1-2 YY0505 IEC/EN61000-4-11 GB17626.11
		跌落到 30%Ut, 持续时间 500ms (25 个周期) / Dropped to 30%Ut, last 500ms (25 cycle)	B	
		跌落到 0%Ut, 持续时间 20ms (1 个周期) / Dropped to 0%Ut, last 20ms (1 cycle)	B	
		跌落到 0%Ut, 持续时间 10ms (0.5 个周期) / Dropped to 0%Ut, last 10ms (0.5 cycle)	A	
7	辐射抗扰 (RS)	试验频率: 80MHz~2700MHz; / Test frequency: 80MHz~2700MHz; 场强: 10V/m; /Field intensity: 10V/m; 幅度调制: 80%AM (1KHz) Amplitude modulation: 80%AM (1KHz)	A	IEC/EN60601-1-2 YY0505 IEC/EN61000-4-3 GB17626.3
8	传导抗扰 (CS)	试验频率: 0.15MHz~80MHz; / Test frequency: 0.15MHz~80MHz; 场强: 6Vrms; /Field intensity: 6Vrms; 幅度调制: 80%AM (1KHz) / Amplitude modulation: 80%AM (1KHz)	A	IEC/EN60601-1-2 YY0505 IEC/EN61000-4-6 GB17626.6
9	电流谐波 (THD)	满足 CLASSA (配合系统测试) /CLASSA (in system)	/	IEC/EN60601-1-2; YY0505 IEC/EN61000-3-2; GB17625.1
10	电压波动和闪烁 /Voltage Fluctuation and Flicker	Pst 值不大于 1.0; P1t 值不大于 0.65; 相对稳态电压变化 dc 不超过 3.3%; 最大相对电压变化 dmax 不超过 4% 相对电压变化持续时间 >500ms 时 ≤ 4% / Pst ≤ 1.0; P1t ≤ 0.65; Relative steady-state voltage variation dc under 3.3%; Maximum relative voltage variation (dmax) under 4%	/	IEC/EN60601-1-2 YY0505 IEC/EN61000-3-3 GB17625.2
11	工频磁场 /Power Frequency Magnetic Field	30A/m	A	IEC/EN60601-1-2; YY0505 IEC/EN61000-4-8; GB17626.8

注: / Note:

性能判据 A: 试验中 EUT 在规范极限值内性能正常;



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性能判据 B: 试验中 EUT 功能或性能暂时降低或丧失, 但能自行恢复;

性能判据 C: 试验中 EUT 功能或性能暂时降低或丧失, 但需操作者干预或系统重调(或复位);

性能判据 D: 试验中 EUT 因装置(或元件)损坏而不可恢复的功能降低或丧失。

Performance criterion A: Normal performance within limits in this specification.

Performance criterion B: Temporary loss of some functions or degradation of performance. The recovering performance of which without operator intervention.

Performance criterion C: Temporary loss of function or degradation of performance .The recovering performance of which requires operator intervention.

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

10. 安全要求/SAFETY REQUIREMENT:

10.1 安全:符合标准./ Safety: accord with.

电源设计用于室内使用, 满足 IEC 60601-1 和 EN 60601-1 标准和以下安全规定。

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

	ITEM	COUNTRY	STANDARD
<input type="checkbox"/>	UL	USA	UL60601-1
<input checked="" type="checkbox"/>	CE	EUROPE	IEN60601-1/EN60601-1
<input checked="" type="checkbox"/>	CB	WORLDWIDE	IEC60601-1
<input 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

10.2 高压/DIELECTRIC STRENGTH Hi-Pot:

初级对次级/The primary to secondary: 4000Vac 10mA for 60 seconds

初级对地/The primary to earth: 1500Vac 5mA for 60 seconds

次级对地/The secondary to earth:500Vdc 5mA for 60 seconds



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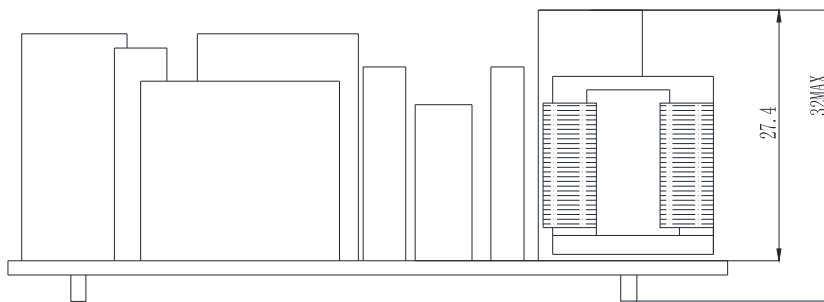
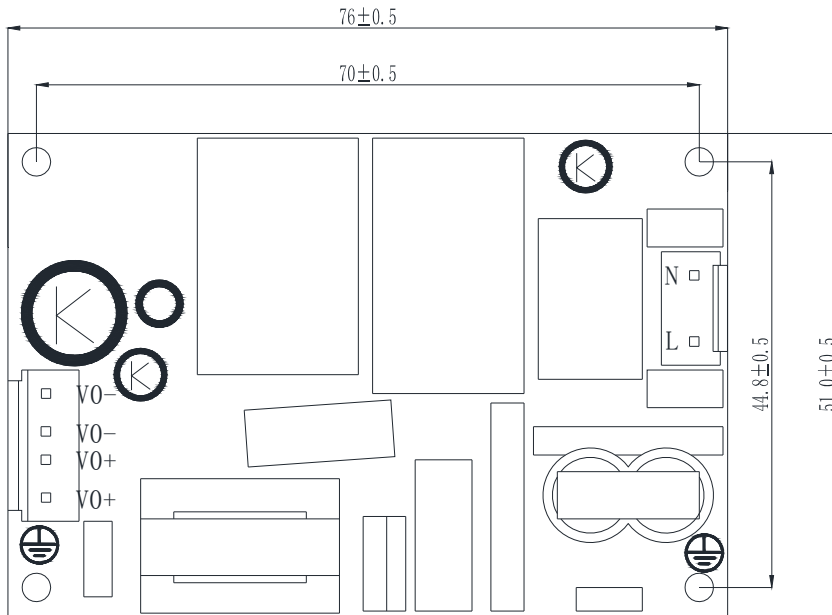
文件编号/ Document No: LXC/RD-Spec-233

11. 连接器定义和结构参数/CONNECTOR DEFINITION AND MECHANICAL REQUIREMENT:

11.1 外形尺寸图/ Outline dimensional drawing:

尺寸: L 76.0x W 51.0 x H 32.0mm(Max);

The power supply size: L76.0 x W 51.0 x H 32.0mm(Mxa);



11.2 连接器定义/the connector definition

输入 3.96, 3PIN 插座 (去中间针) /3.96, 3PIN socket (without middle pin), 输出 3.96, 4PIN 插座/3.96, 4PIN socket

输入引脚序号	信号名称	输出引脚序号	信号名称
1	N	1	V+
2	空	2	V+
3	L	3	V-
		4	V-

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12. 铭牌/LABEL:

铭牌/Label size:20mm*23mm

Medical Switching Power Supply

Model (型号) : ACMS100-120 RoHS

Input (输入) : 100-240V~, 50/60Hz, 2.0A Max.

Output (输出) : 12.0V===8.5A;10CFM: 12.0A

Manufactory: Shenzhen Longxc Power Supply Co.,LTD.

制造商:深圳市龙星辰电源有限公司

SN XXXXXXXXXXXXXXXXXXXX

Medical Switching Power Supply

Model (型号) : ACMS100-240 RoHS

Input (输入) : 100-240V~, 50/60Hz, 2.0A Max.

Output (输出) : 24.0V===4.2A;10CFM: 5.9A

Manufactory: Shenzhen Longxc Power Supply Co.,LTD.

制造商:深圳市龙星辰电源有限公司

SN XXXXXXXXXXXXXXXXXXXX

Medical Switching Power Supply

Model (型号) : ACMS100-480 RoHS

Input (输入) : 100-240V~, 50/60Hz, 2.0A Max.

Output (输出) : 48.0V===2.1A;10CFM: 3.0A

Manufactory: Shenzhen Longxc Power Supply Co.,LTD.

制造商:深圳市龙星辰电源有限公司

SN XXXXXXXXXXXXXXXXXXXX



贴标签位置

铭牌符号说明 :/ Symbol explanation on nameplate:

RoHS :环保标识/ RoHS mark

:CE 标识/ CE mark

:保护环境 ——废弃电器产品应统一回收处理, 不能随意丢弃/ Environment protection- waste electrical products should not be disposed of with household waste.

Please follow the local government guidelines

SN XXXXXXXXXXXXXXXXXXXX

- X 代表 RoHS (1 位): RoHS 区分 0 为 RoHS, 1 为非 RoHS;
- XX 代表 生产批次 (2 位): 如第一批为 01……以此类推;
- XXX 代表 电源型号 (3 位): ACMS100 为 100;
- X 代表 生产加工商 (1 位): LXC 为 1;
- XX 代表 PCB 版本 (2 位): 01 为 01, 02 代表 02 号……以此类推;
- XX 代表 生产年份 (2 位): 2020 为 20, 2021 代表 21……以此类推;
- XX 代表 生产周期 (2 位): 第 1 周为 01, 02 周为 02……52 周代表 52;
- XXXXX 代表 订单数量 (5 位): 如订单量为 10000 个, 标识为 00001-10000。



深圳市龙星辰电源有限公司
Shenzhen Longxc Power Supply Co.,LTD

型号/Our model: ACMS100 系列

客户/Customer:

日期/Date: 2021.09.22

文件编号/ Document No: LXC/RD-Spec-233

13. 包装说明/PACKING:

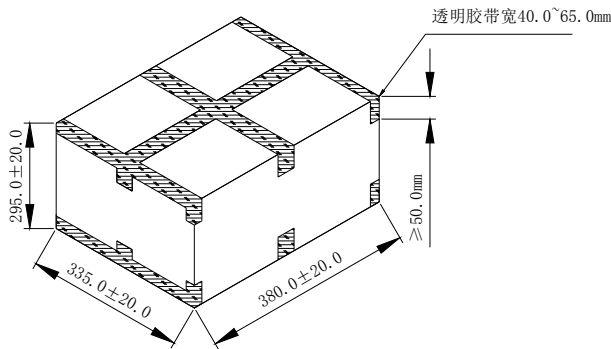
- 包装方式:63pcs/箱 (尺寸:380.0*335.0*295.0mm)
- Packing Q'ty 63pcs/CTN (Size: 380.0*335.0*295.0mm)
- 重量:约 115g
- Weigh: about 115g

纸箱: 380.0×335.0×295.0mm

21台/层×3=63台/箱

重量: 约7.03千克/箱

外箱丝印:



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

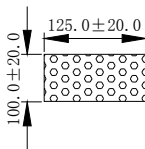
4-5/F,B Building, Yingrenshi Community, Wentao Science Park,

Shiyan Town, Bao'an, Shenzhen, China

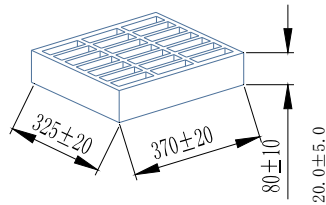
Tel: 0755-27784192 27864721

Fax: 0755-29991201

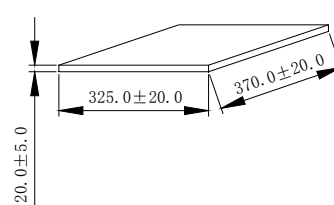
Web: <http://www.longxc.com>



气泡袋



珍珠棉



珍珠棉板

