



MFMC-22000

使用手册

版权说明

“ ”

引 语

MFMC

MFMC

公司简介

2004

<http://www.maxphotonics.com>



:
: <http://www.maxphotonics.com>
: 400-900-9588
: +86-755-36869377
: info@maxphotonics.com

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5-	13
6-	14
7-	14
	15
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2-	16
3-	16
4-LOE	17
5-	18
6-	19






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3-	20
4-	22
5-	22
6-	23
7-	29
	32
1-	32
2-	33
3-	34
4-LOE	38
	40
1-	40
2-	44
	45
1-	45
2-	46
	48
1-	48
2-	48

第一章 特性说明

MFMC
MFMC
>30%
MFMC
1060nm 1100 nm
Class 4

第二章 安全信息

1 -

MFMC
22KW

1060nm 1100 nm

1

2-

2

LaserVision USA Kentek Corporation Rochwell Laser
Industries

3-

EN 61000-6-4:2007+A1:2011

CISPR 16-2-1

CISPR 16-2-3

EN 61000-6-2:2005

EN 61000-4-2:2009

EN 61000-4-3:2006+A1:2008+A2:2010

EN 61000-4-4:2012

EN 61000-4-5:2014

EN 61000-4-6:2014

EN 61000-4-11:2004

EN 60825-1:2014

CDRH 21 CFR 1040.10

EN 60204-1:2018

	MFMC		CE EMC	
" EMC Directive"		EMC	" EMC"	EN 61000-6-4
EN 61000-6-2				
	MFMC		Class 4	21 CFR
J 1040.10 d				
		Class 4	EN 60825-1	9

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MFMC

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400V AC, 3P+PE

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Laser Institute of America(LIA)

13501 Ingenuity Drive, Suite 128

Orlando,Florida 32826

Phone:407 380 1553,Fax: 407 380 5588

Toll Free:1.800.345.2737

American National Standards Institute

ANSI Z136.1, American National Standard for the Safe Use of Lasers

(Available through LIA)

International Electro-technical Commission

IEC 60825-1, Edition 1.2

Center for Devices and Radiological Health

21 CFR 1040.10 - Performance Standards for Light-Emitting Products

US Department of Labor - OSHA

Publication 8-1.7 - Guidelines for Laser Safety and Hazard Assessment.

Laser Safety Equipment

Laurin Publishing

Laser safety equipment and Buyer' s Guides

第三章 产品描述

1-

MFMC

1

2

3

4

5

1

2

2-

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M - F - M - C - XXX - XXXX	
1 - 2 - 3 - 4 - 5 - 6	
1	M Maxphotronics
2	F Fiber Laser

3		M Multi-Mode
4		C ContinueWave
5	XXXX	XXXX W
6		

4-

5-



		400VAC
	START	
	ALARM	
	ACTIVE	
	POWER	

6-

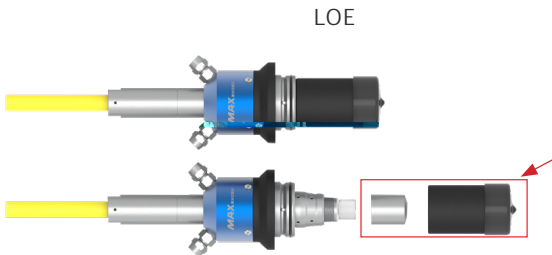


	CTRL	
	RS232	RS232
	WATER OUT	(1.25)
	WATER IN	(1.25)

7-

1

LOE



第四章 详细规格

1-

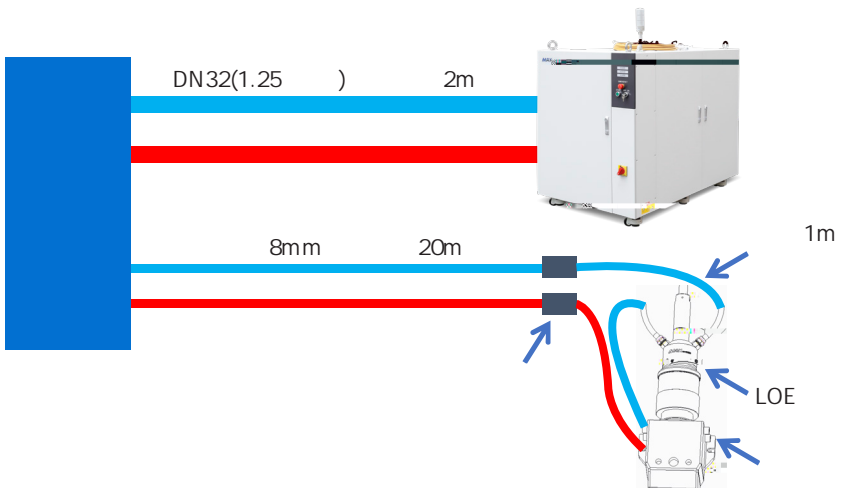
	/				
MFMC-22000	100%		22000		W
		10		100	%
	100%	1070	1080	1090	nm
3dB	100%		5	8	nm
	100% >1h		± 1	± 2	%
	100% >24h		± 2	± 3	%
BPP	100% (150um)	4.5		6.5	mm x mrad
	100% (200um)	8		10	
			150	200	μs
			150	200	μs
	100%			5	KHz
	100%	200			uW
			20		m
	150/200				μm
		200			mm
	LOE (Q+)				

0

4-LOE

			L/min	bar	
LOE		8	4	5	28-30

8mm 20m ;
 LOE 8 1m ;
 LOE ;
 p 3bar



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1000

2

10 - 40

3

10% - 80%

4

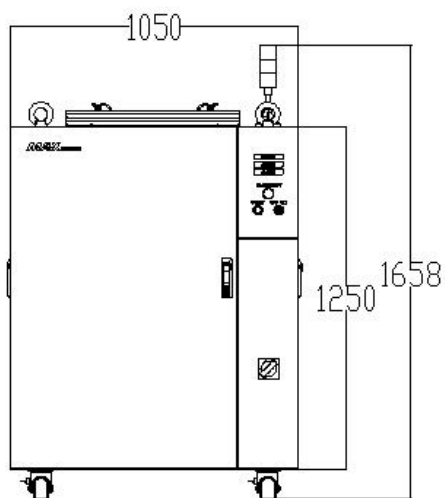
环境温度、相对湿度、露点对照表														
相对湿度%	30	35	40	45	50	55	60	65	70	75	80	85	90	95
环境温度(℃)	露点Td (°C)													
10	-7.0	-5.0	-3.0	-1.3	0.0	1.5	2.5	3.6	4.8	5.8	6.7	7.6	8.4	9.2
11	-6.5	-4.0	-2.0	-0.5	1.0	2.5	3.5	4.8	5.8	6.7	7.7	8.6	9.4	10.2
12	-5.0	-3.0	-1.0	0.5	2.0	3.3	4.4	5.5	6.7	7.7	8.7	9.5	10.9	11.2
13	-4.5	-2.0	-0.2	1.4	2.8	4.1	5.3	6.6	7.7	8.7	9.6	10.5	11.4	12.2
14	-3.2	-1.0	0.7	2.2	3.5	5.1	6.4	7.5	8.6	9.6	10.6	11.5	12.4	13.2
15	-2.3	-0.3	1.5	3.1	4.6	6.0	7.3	8.4	9.6	10.6	11.6	12.5	13.4	14.2
16	-1.3	0.5	2.4	4.0	5.6	7.0	8.3	9.5	10.6	11.6	12.6	13.4	14.3	15.2
17	-0.5	1.5	3.2	5.0	6.5	8.0	9.2	10.2	11.5	12.5	13.5	14.5	15.3	16.2
18	0.2	2.3	4.0	5.8	7.4	9.0	10.2	11.3	12.5	13.5	14.5	15.4	16.4	17.2
18.2	1.9	10.0	3.2	5.0	7.2	8.4	9.8	11.0	12.2	13.4	14.5	15.4	16.6	17.3
19.2	2.0	2.0	4.0	6.0	7.8	9.4	10.7	12.0	13.2	14.4	15.4	16.5	17.4	18.3
20.2	2.1	2.8	5.0	7.0	8.6	10.2	11.0	12.9	14.2	15.3	16.4	17.4	18.4	19.3
21.2	2.2	3.5	5.8	7.8	9.5	11.0	12.5	13.8	15.2	16.3	17.3	18.4	19.4	20.3
22.2	2.3	4.4	6.8	8.7	10.4	12.0	13.5	14.8	16.2	17.3	18.4	19.4	20.4	21.3
23.1	2.4	5.3	7.7	9.7	11.4	13.0	14.5	15.8	17.0	18.2	19.3	20.4	21.4	22.3
23.9	2.5	6.2	8.6	10.5	12.3	14.0	15.4	16.8	18.0	19.1	20.8	21.3	22.3	23.2
25.1	2.6	7.0	9.4	11.4	13.2	14.8	16.3	17.7	19.0	20.1	21.2	22.3	23.3	24.2
26.1	2.7	8.0	10.3	12.2	14.0	15.8	17.3	18.7	19.9	21.1	22.2	23.2	24.3	25.2
27.1	2.8	8.8	11.2	13.2	15.0	16.7	18.0	19.6	20.8	22.0	23.0	24.2	25.2	26.2
28.1	2.9	9.7	12.0	14.0	15.9	17.6	19.2	20.5	21.9	23.0	24.1	25.2	26.2	27.2
29.1	3.0	10.5	12.9	14.9	16.8	18.5	20.0	21.4	22.8	23.9	25.1	26.2	27.2	28.2
30.1	3.1	11.4	13.8	15.9	17.8	19.4	20.9	22.4	23.0	24.8	26.0	26.9	28.2	29.2
31.1	3.2	12.2	14.7	16.8	18.6	20.3	21.9	23.3	24.6	26.8	27.0	28.1	29.2	30.1
32.1	3.3	13.0	15.6	17.6	19.6	21.3	22.9	24.2	25.6	26.8	28.0	29.0	30.1	32.1
33.1	3.4	13.9	16.5	18.6	20.5	22.2	23.8	25.2	26.5	27.7	29.0	29.5	31.1	32.1
34.1	3.5	14.8	17.4	19.4	21.4	23.0	24.6	26.0	27.3	28.6	29.9	30.4	31.4	32.4
35.1	3.6	15.7	18.3	20.3	22.2	24.0	25.6	27.0	28.3	29.6	30.9	31.4	32.4	33.4
36.1	3.7	16.6	19.2	21.2	23.0	25.0	26.6	28.0	29.3	30.6	31.9	32.4	33.4	34.4
37.1	3.8	17.5	19.9	22.0	23.8	26.0	27.6	29.0	30.3	31.6	32.9	33.4	34.4	35.4
38.1	3.9	18.4	20.8	22.9	24.7	27.0	28.6	30.0	31.3	32.6	33.9	34.4	35.4	36.4
39.1	4.0	19.2	21.6	23.8	25.6	28.0	29.6	31.0	32.3	33.6	34.9	35.4	36.4	37.4
40.1	25.0	27.0	28.4	29.0	30.9	32.0	33.1	34.1	35.2	36	15.7	18.1	20.3	22.2
40.9	26.5	27.9	29.5	30.7	31.8	33.0	34.1	35.2	36.2	37	16.6	19.2	21.2	23.2
41.8	27.4	28.9	30.3	31.5	32.0	33.9	35.1	36.0	37.0	38	17.5	19.9	22.0	23.9
42.6	28.3	29.8	31.2	32.5	33.8	34.9	36.2	36.8	38.1	39	18.1	20.8	23.0	24.9
43.4	29.2	30.7	32.1	33.5	34.7	35.8	36.8	38.1	39.1	40	19.2	21.6	23.8	25.8

28

50%

6-

mm



第五章 使用指南

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400V AC

ΔW	ΔVAC	ΔA	ΔA	ΔkW
MFMC-22000	400V \pm 10%, 3P+PE	140	220	80

3-

CTRL

24P

CTRL				
15	Modulation input+		+	HIGH:20VDC V 24VDC LOW:0VDC V 5VDC
4	Modulation input-		-	5mA I 15mA
16	Emission Enable input+		+	HIGH:20VDC V 24VDC LOW:0VDC V 5VDC
3	Emission Enable input-		-	5mA I 15mA
12	DA(0-10V) input 0-10V+	0-10V	+	(1V-10% 10V-100%)
5	DA(0-10V) input 0-10V-	0-10V	-	
6	External laser output+		+	HIGH:20VDC V 24VDC LOW:0VDC V 5VDC
7	External laser output-		-	5mA I 15mA
18	ERROR1		+	ON/OFF(ON- , OFF-) (V 24VDC, I 100mA)
23	ERROR2		-	
1	LASER_RDY_OUT+		+	0V/24V DC (I 10mA)
2	LASER_RDY_OUT-		-	
8	EX LOCK+		+	ON/OFF(ON- , OFF-) (V 24VDC, I 100mA)
19	EX LOCK-		-	
21	EX EMERGENCY+		+	HIGH:20VDC V 24VDC LOW:0VDC V 5VDC
14	EX EMERGENCY-		-	5mA I 15mA
17	EX RED CONTROL+		+	HIGH:20VDC V 24VDC LOW:0VDC V 5VDC
24	EX RED CONTROL-		-	5mA I 15mA
13	AN PWR OUT+		+	0-8V DC
20	AN PWR OUT-		-	(I 2mA)

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ON

6

" ON"

7

START ()

1

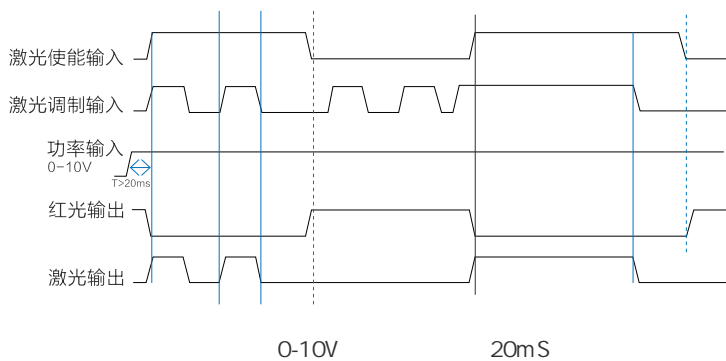
2

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2

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Max G3_Series - 1.0.0.58 (客户版).exe	2019/3/9 18:00	应用程序	10,060 KB
NET46-x86-x64-ALIOS-ENU.exe	2017/8/9 16:13	应用程序	63,911 KB

3

Max G3_Series - 1.0.0.58

.exe



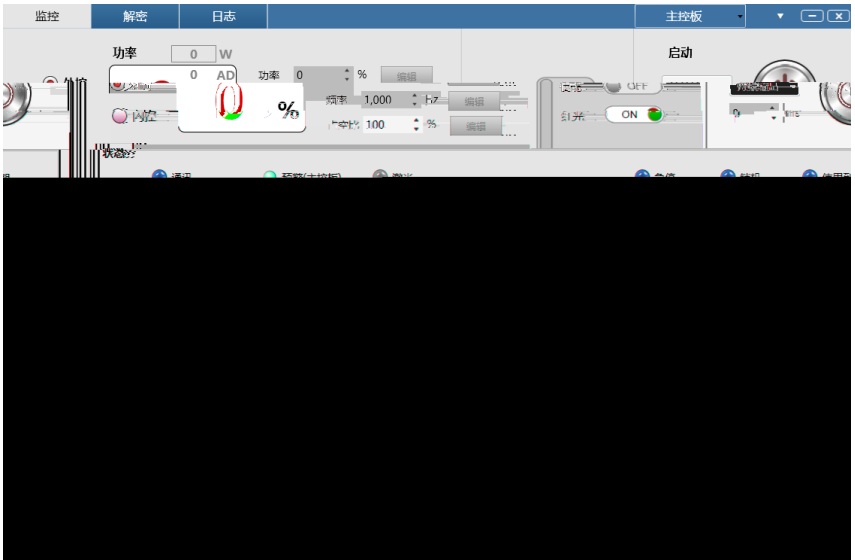
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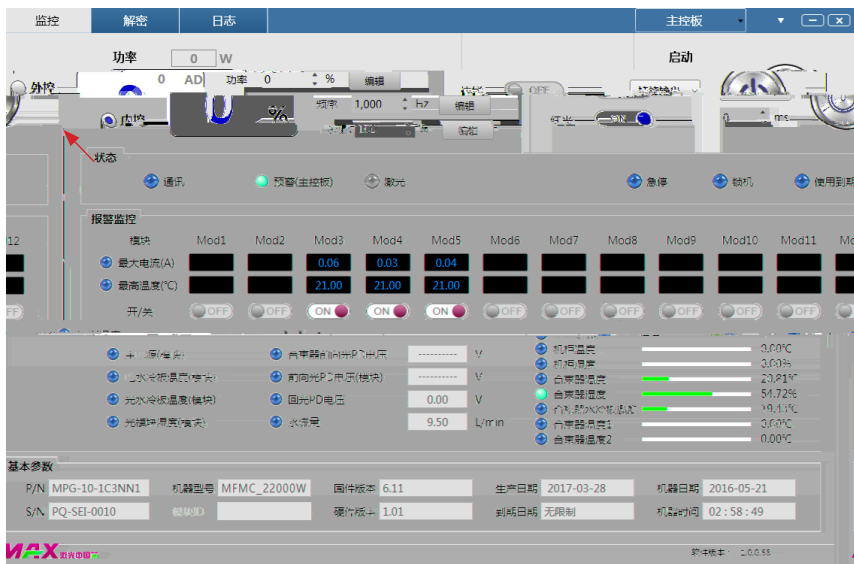
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PC

/ /DA



6

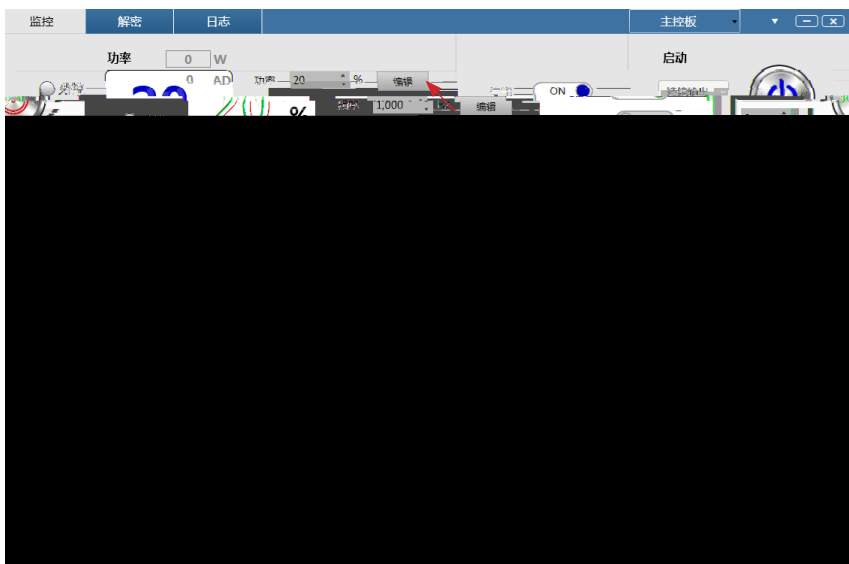


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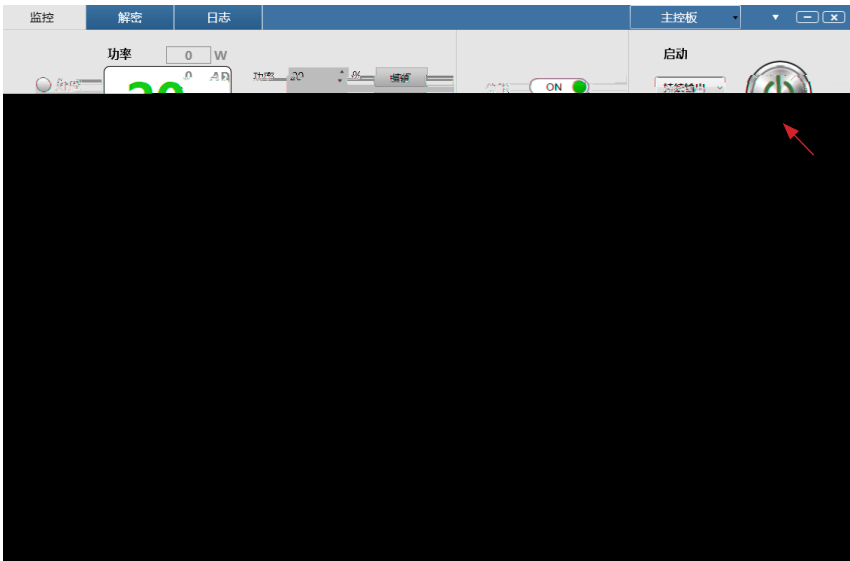
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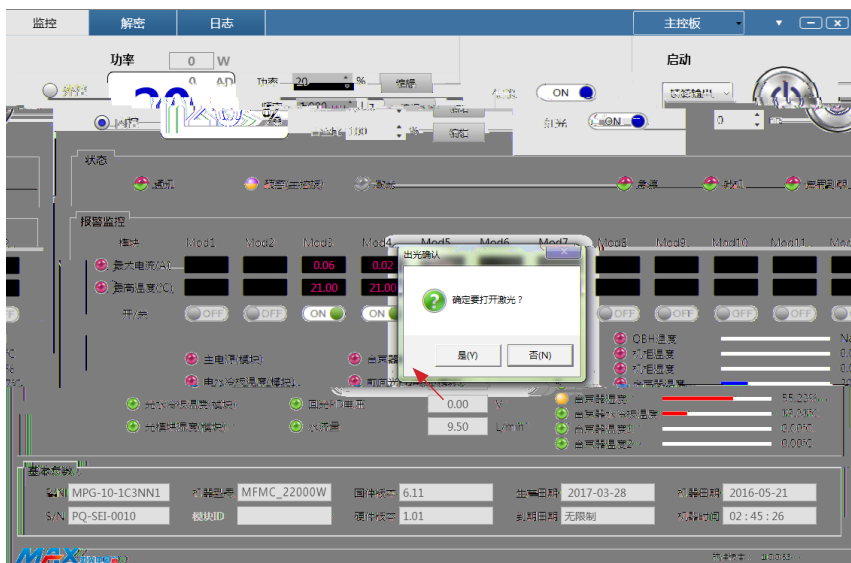
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11



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13



7-

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3			

4		QBH	QBH
5			
6			
7		1. 2.	

<p>8</p>			<p>1. 2.</p> <p>MOS</p>
<p>9</p>			
<p>10</p>			

第六章 光纤连接器检查和清洁指南

1-

1

2



3

>99.5%

4

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20



2-

1

LOE

1000



2

1

" OFF"

2

20

2.2.5

3

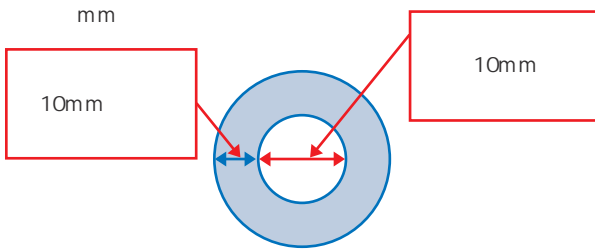
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LOE		
	10mm	10mm
15KW		0.05 0.01



3-

1

“OFF”

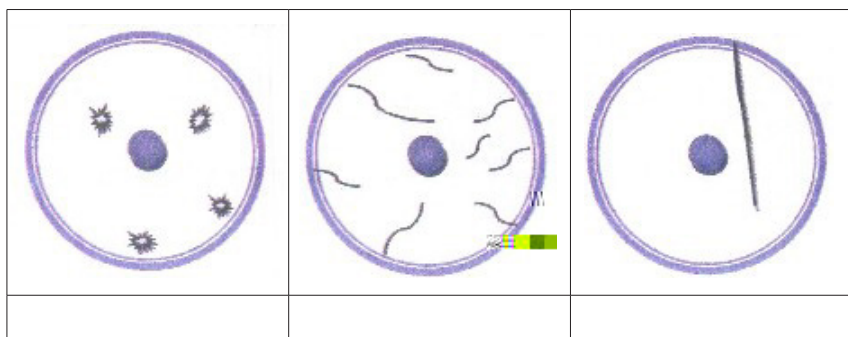
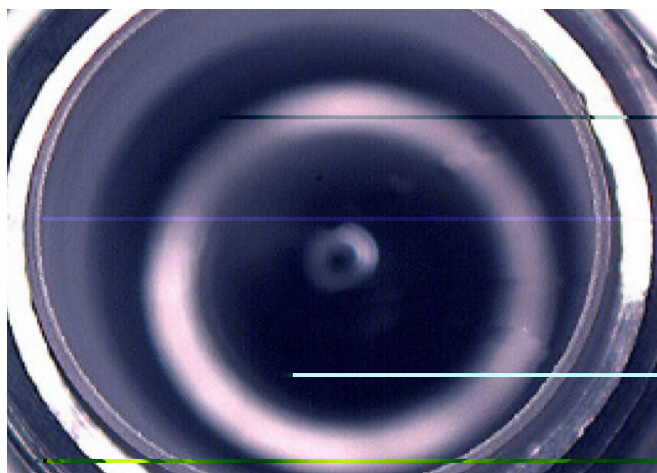
2

1

20

180°

2



2

3

1



2

20

3.2.1



3

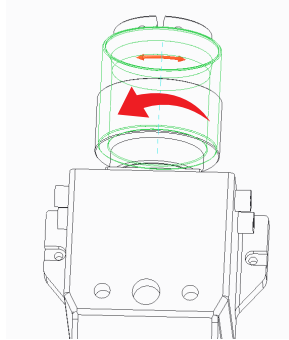
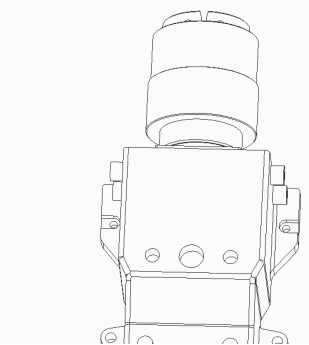


4-LOE

1

1 LOE

LOE

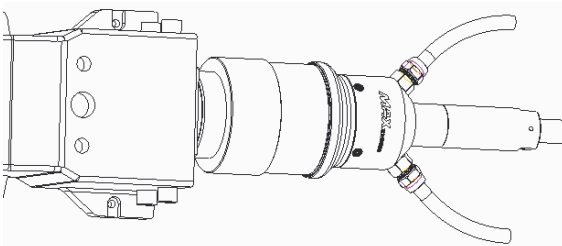
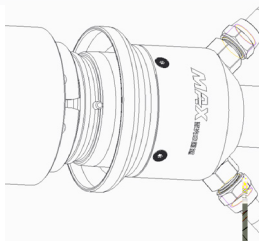
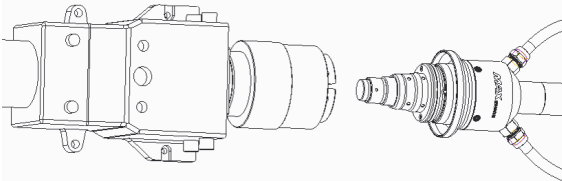


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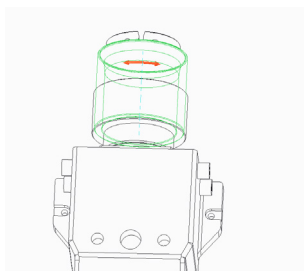
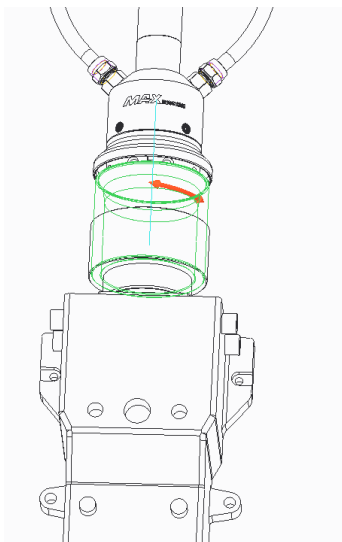
LOE

LOE

LOE



3



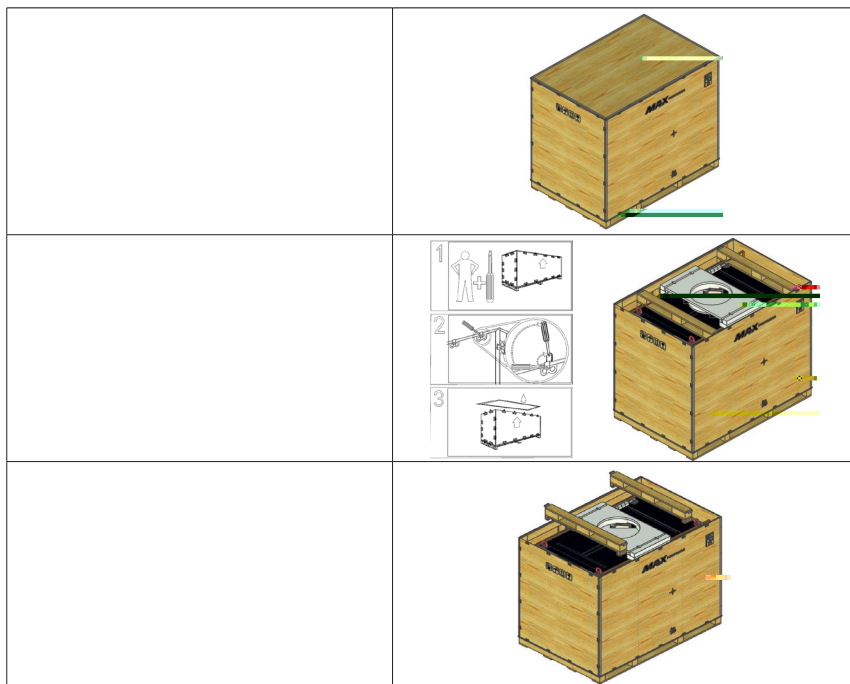
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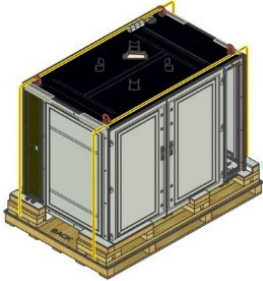
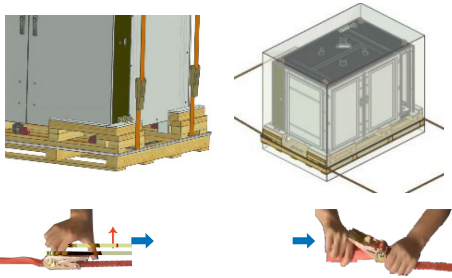
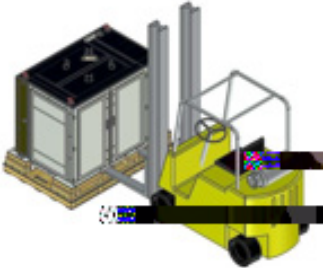
LOE

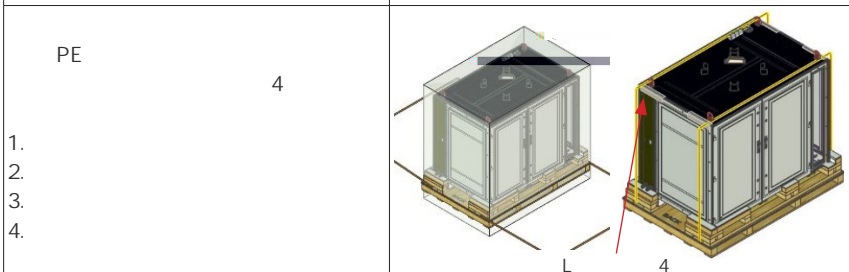
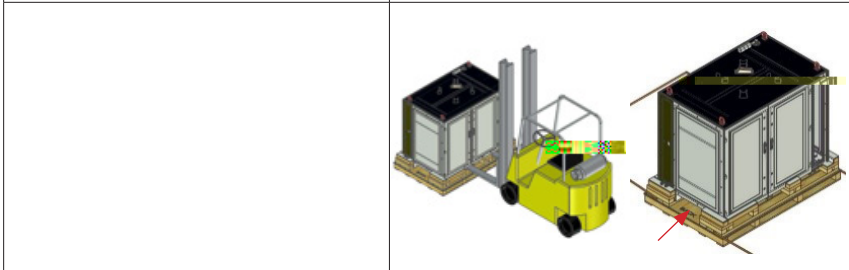
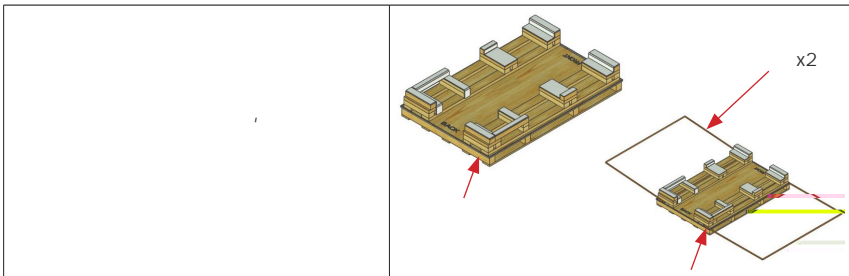
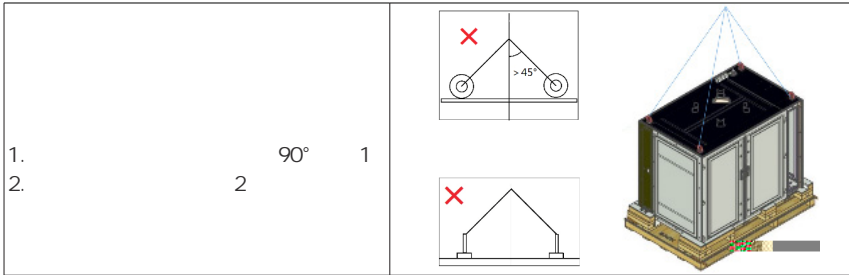
LOE

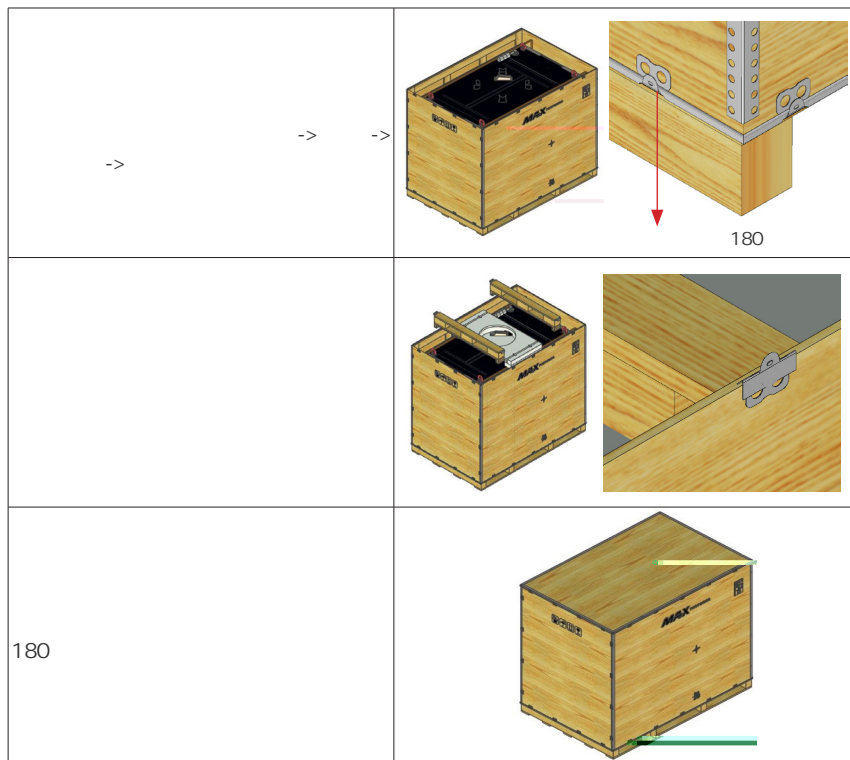
第七章 拆装指南

1-



	
<p>-> -> -></p>	
<p>1. 2. PE 3. 180°</p>	
	





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2-

1		MFMC-XXX		1
2				1
3	USB RS232	(UNITEK) Y-108		1
4	RS232			1
5				2
6	U			1
7				1
8		31.8mm		1
9		43-46		2
10	LOE	8x5mm		1

第八章 服务与维修

1-

18682447838

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1 7X24

400-900-9588

1 -> 2

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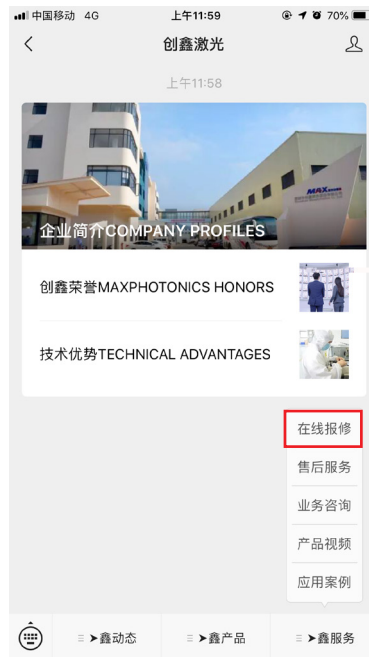
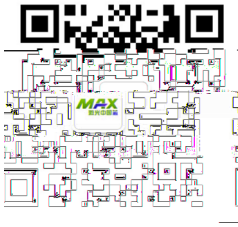
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18682446878

18682447838

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www.maxphotonics.com

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2

- 1 PN
- 2 SN
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第九章 保修声明

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