



**MFPN-20M-50M 2.0 代调 Q 脉冲光纤激光器**

# 使用手册

## 版权说明

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## 引 语

MFP Q

MFPN-20M-50M Q

## 公司简介

2004

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# 第一章 特性说明

MFPN-20M-50M Q




1064± 5nm

MFPN-20M-50M Q

Class 4

## 第二章 安全信息

1 -

1064nm

Class IV

20W

2-

1

2

LaserVision USA Kentek Corporation Rochwell Laser Industries

3-

1

2

3

1

2

3

5

6

7

8

9

9

4

MFPN-20M-50M Q

24VDC

	+24VDC
	GND

DC

24VDC

5

1

2

7cm



2

3

6

- 1
- 2
- 3
- 4
- 5
- 6

7

## 4-

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 34 LASER

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 -

MFPN-20M-50M Q

Q

MOPA

1064nm

25Pin

/ ,

1

2

3

4 25

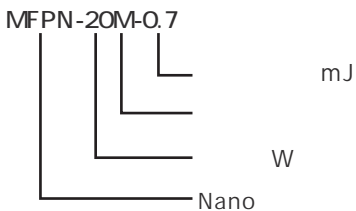
1 /

2

2-

MFPN-20M	20W Q
MFPN-25M	25W Q
MFPN-30M	30W Q
MFPN-50M	50W Q

M:MAX	F:Fiber laser	P: Pulsed	(Q-Switch Q)	MFP
			T: Tunable	MFPT
			P: Picosecond	MFPP
			F: Femtosecond	MFPF
			N Nano	MFPN



3-

## 第四章 详细规格

1 -

:2.0

	MFPN- 20M-0.7	MFPN- 25M-0.6	MFPN- 30M-1	MFPN- 50M-1.1	
	1064+-3	1064+-3	1064+-3	1064+-3	nm
@ 25	18.5± 0.5	26± 1	31± 1	51± 1	W
	27-62	40-60	30-60	45-170	kHz
	80-110				ns
M2	<1.6	<1.6	<1.6	<1.6	/
	27	40	30	45	kHz
	0.7	0.6	1	1.1	mJ
	7	6	11	12	kW
	<5				%
	10	100	10	100	%
	QCS				/
1/e2	6-8				mm
	90				%
	1.9			3	m
	70-130				us
	20-60				us

2-

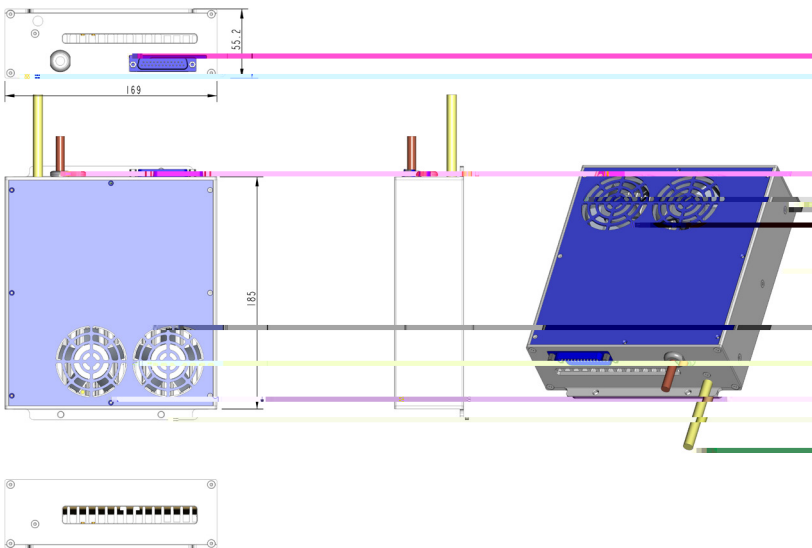
:2.0

	MFPN-20M	MFPN-25M	MFPN-30M	MFPN-50M	
	24				DC
	<90	<110	<120	<200	W
	202*169*55	202*169*55	232*195*74.2	232*195*74.2	mm
	2.2	2.2	3.5	3.5	kG
	10		40		
	-10		+60		
	10%		95%		%

3-

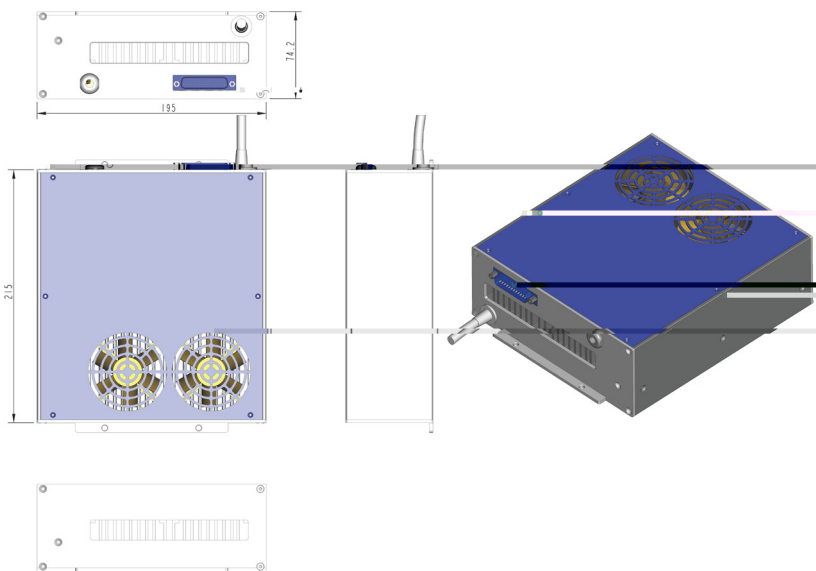
20-25M

mm

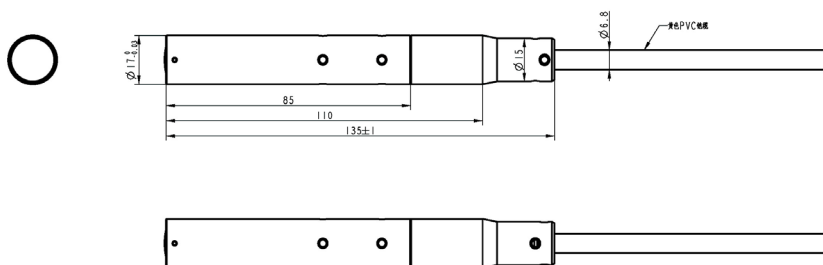


30-50M

mm



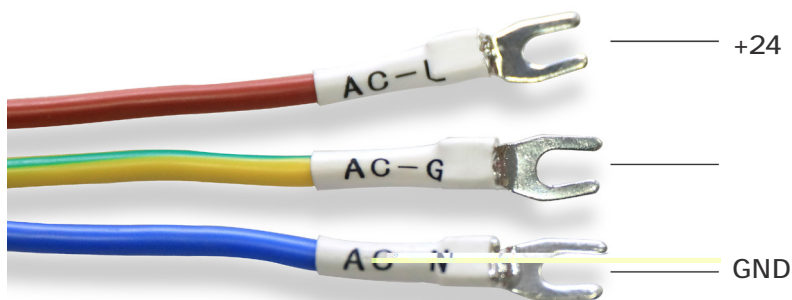
mm



## 第五章 使用指南

	1
	1

1-





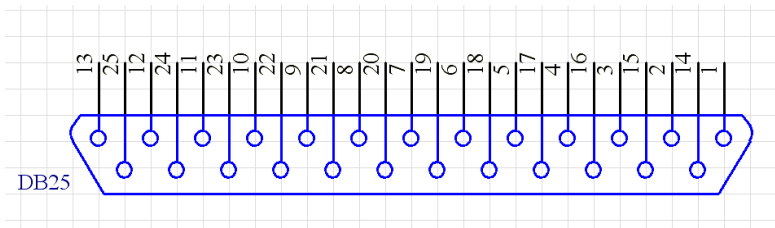
## 2-DB25

1

Pin TTL

TTL

Pin#	
1-8 D0-D7	16 0-FF 10 0-255 LSB(D0) Pin1, MSB(D7) Pin8 - 00h(0): - FFh(255): - 00h.
9	Latch
10-15	
16 21	Pin16 Pin21
	L L
	L H
	H H MO
	H L PD
18	MO - H MO - L MO
19	Booster / - H Booster - L Booster
20	PRR 0.1~0.9
22	/
23	- H OK( - L STOP(



2 DB-25

1 DB25 5.2.1

2 Pin1~8 8bit Pin1 LSB Pin8 MSB Pin  
 0-255 0-100%

	1	2	3	4	5
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	1	1
6	0	0	1	1	1
7	0	1	1	1	1
8	1	1	1	1	1
	50%	75%	87.5%	93.75%	100%
	35%	65%	85%	92%	100%

3 Pin16 Pin21 2Pin

16	21	
L	H	
H	H	MO

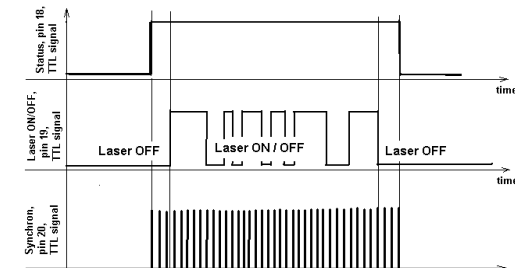
4 Pin18 MO MO Booster BS

5ms MO

5 Pin19 Booster BS H

BS L BS Pin19 H

L





4	24VDC							+24V
5		24VDC						
		24VDC						
6		Pin23	H					
7	Pin1~8							
8	Pin18	H	MO					
9	5ms							
10	Pin19					H/L		
	/					4		
				/			250us	
500us		2kHz						
11								
20ms		MO				MO		MO
12			BS	MO	Pin18	Pin19		L
13	24VDC							
<b>2</b>								
1				Pin20	PRR			PRR
					PRR			
	20kHz			50us				
	PRR							
2				Pin1~8				
3	Pin18	H	Pin19	L				20mW

4  
Pin21

+55

+55  
Pin16

4-

MFP

Q

SAMight				
	/			
1		50	100	Us
2		50	100	Us
3		50	100	Us
4		-60	-150	Us
5		60	150	Us

EzCad				
	/			
1		50	150	Us
2		50	150	Us
3		-50	-200	Us
4		20	150	Us
5		60	150	Us

	/			
1		50	100	Us
2		50	100	Us
3		20	100	Us
4		-50	-200	Us
5		50	150	Us

5-

	20X	20W	20H	30X	30W	30H	30H	50X	50W	50H	70W
F=100	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+
F=160	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+
F=254	A	A	A	A	A+	A+	A+	A+	A+	A+	A+
F=330	B	B	B	B	A	A	A	A	A	A+	A+
F=420	C	C	C	C	C	B	B	B	A	A	A
F=525	D	D	D	D	D	C	C	C	C	C	B

A+:

A

A+

B

C

D

## 第六章 常见故障处理

NO			
1			1. +24V GND
			2.
			3. PIN18    PIN19
			4. DB25
			5. PIN23
			6.
			7.
			8.
		DB25	9. PIN22    "0" ("1"    )
			10. DB25
		11.	
		12.	



NO			
4			1.
			2.
			3.
			4.
			5.
			6.            2
			7.
			8.
		9.	
		MOPA	
5		1. GND 2.	+24V
6		1.	

NO				
7			1.	
			2.	
			3.	53
			4.	19
5.				
8			1. 15-20mW	
9		DB25	1. DB25	
			2.	
10			1.	
			2.	53
		PIN16 PIN21	3. PIN16 PIN21 PIN21	PIN16

## 第七章 服务与维修

1-

2-

400-900-9588

## 第八章 保修声明

1 -

2 -

1  
2  
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