

	Specifications	Revision:	V3.7
	MOPA pulsed fiber lasers	Date:	202401
	Model: YFPN-500-GME-LR05101W	Page:	1/6

1. Optical characteristics

N	Characteristics	Parameter value	Unit
1	Central wavelength	1060-1080	nm
2	Spectral width @3dB	<20	nm
3	Maximum pulse energy	1.5	mJ
4	Output power	500	W
5	Power adjustment range	0-100	%
6	Frequency adjustment range	1-3000	kHz
7	Laser switching ON/OFF time	<20	μs
8	Pulse width	50-500	ns
9	Output power instability	<5	%
10	Beam quality M ²	<1.8	/
11	Polarization direction	Random	/
12	Anti-high reflection	Yes	/
13	Indicator red light	0.3-2	mW
14	Collimated beam diameter (4σ)	9-11	mm
15	Delivery cable length	5	m



	Specifications	Revision:	V3.7
	MOPA pulsed fiber lasers	Date:	202401
	Model: YFPN-500-GME-LR05101W	Page:	2/6

2. Electrical characteristics

N	Characteristics	Parameter value	Unit
16	Power supply voltage	48	VDC
17	Working current	<40	A
18	Power consumption	<1920	W
19	Recommended power supply	>2500	W

3. Environmental requirements

N	Characteristics	Parameter value	Unit
20	Operating temperature	0 - 40	°C
21	Storage temperature	-10 - 60	°C
22	Cooling method	Water cooling	/
23	Low temperature water temperature (laser)	28±1	°C
24	High temperature water temperature (Isolator)	30±1	°C
25	Water cooler flow rate (chassis)	≥5	L/min
26	Water cooler flow rate (Isolator)	≥2	L/min
27	Chassis water pipe diameter	10	mm



	Specifications		Revision:	V3.7
	MOPA pulsed fiber lasers		Date:	202401
	Model: YFPN-500-GME-LR05101W		Page:	3/6

28	Isolator water pipe diameter	6	mm
29	Cooling capacity	≥1.5	kW

4. Structural characteristics

N	Characteristics	Parameter value	Unit
30	Laser dimension	485*461*82	mm ³
31	Isolator dimension	277*70*60 (87*Φ35)	mm ³
32	Weight:Net weight/Gross weight	21.34/25.96	kg
33	Carton dimension	745*570*240	mm ³

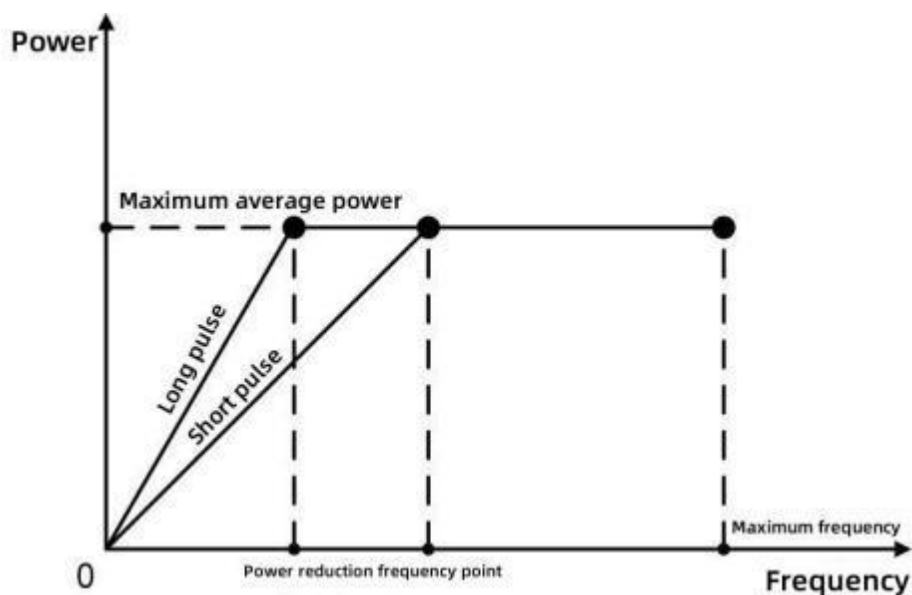
5. The pulse width corresponds to the power reduction frequency point and the maximum single pulse energy

N	Pulse width (ns)	Power reduction frequency(kHz)	Upper frequency limit (kHz)	Max single pulse energy (mJ)
1	1 (CW)	/	/	/
2	50	1400	3000	0.36
3	60	1200	3000	0.42
4	80	1000	2000	0.50
5	90	850	2000	0.59



	Specifications		Revision:	V3.7
	MOPA pulsed fiber lasers		Date:	202401
	Model: YFPN-500-GME-LR05101W		Page:	4/6

6	100	750	2000	0.67
7	120	625	2000	0.80
8	150	500	1000	1.00
9	200	400	1000	1.25
10	250	350	600	1.43
11	350	330	500	1.52
12	450	330	400	1.52
13	500	330	400	1.52

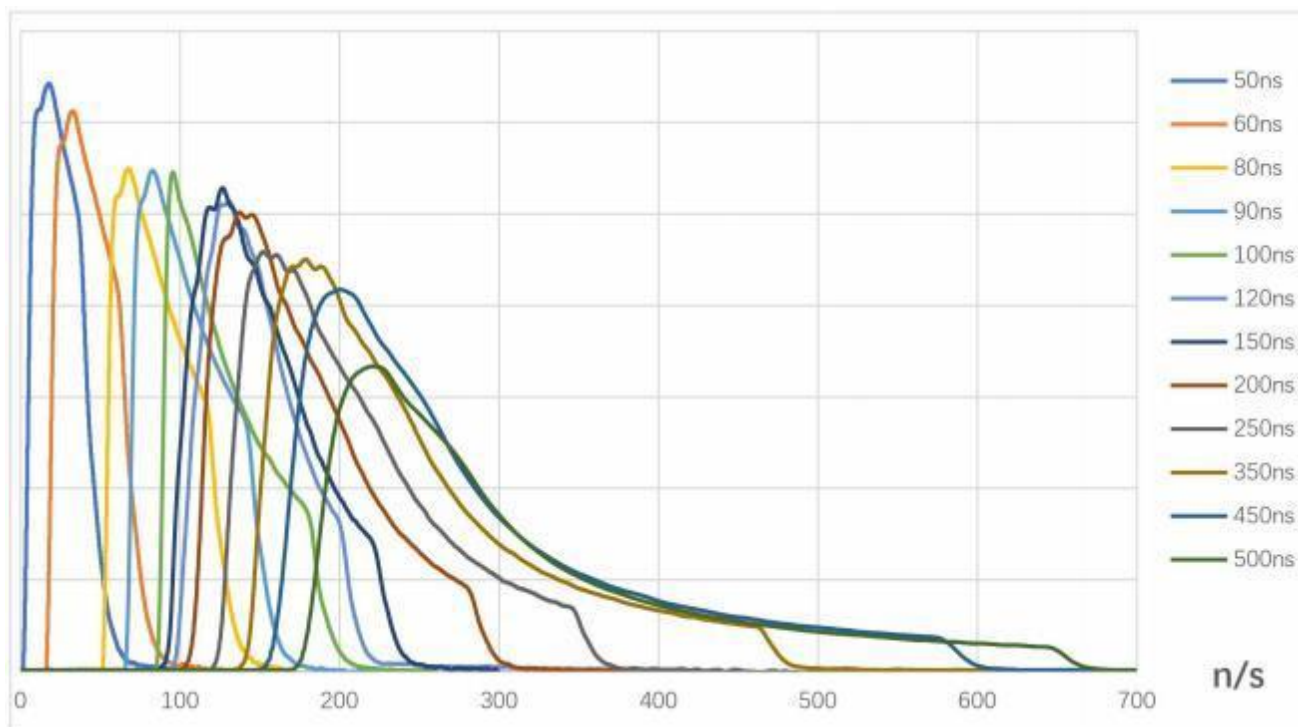


The relationship between laser output power and frequency



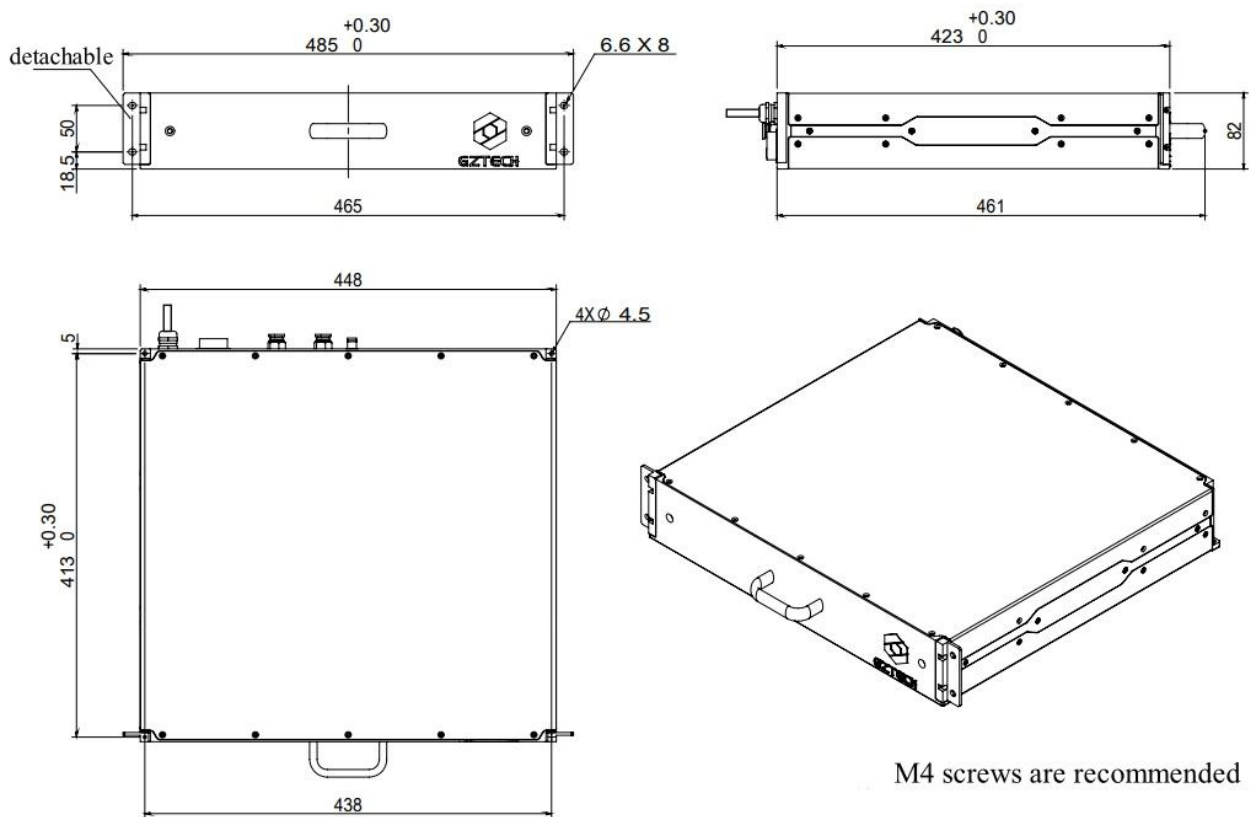
	Specifications	Revision:	V3.7
	MOPA pulsed fiber lasers	Date:	202401
	Model: YFPN-500-GME-LR05101W	Page:	5/6

6. Pulse width waveform

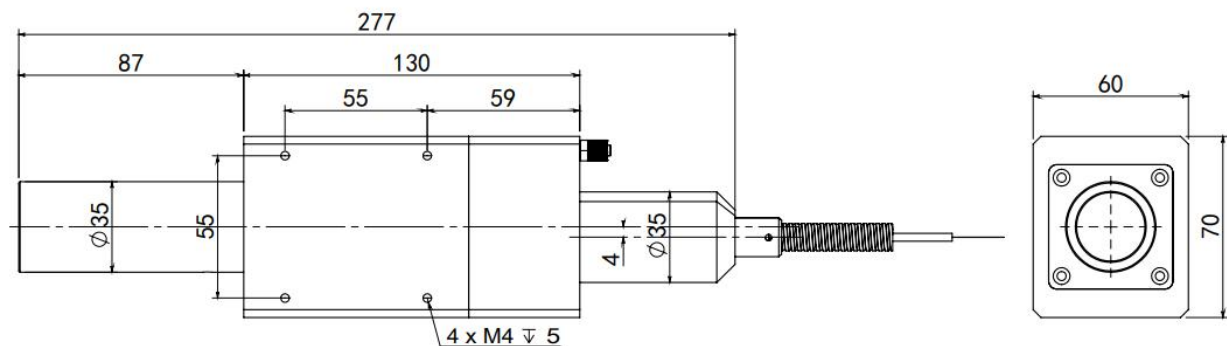


	Specifications		Revision:	V3.7
	MOPA pulsed fiber lasers		Date:	202401
	Model: YFPN-500-GME-LR05101W		Page:	6/6

7. Dimension



Laser dimension



Isolator dimension

